

10¢

ASTOUNDING STORIES

A CLAY
MAGAZINE



YOND THE VARNING
POINT

Tale of a Golden Atom—an
Astounding Adventure in Space

RAY CUMMINGS

M
A
R

3
1

XUM



This Queer Little Automatic Device Protects My Car From Thieves ELECTRICALLY!

I have hit on something truly amazing. Since the first discoveries of radio, I know there has been nothing so startling and uncanny. My little secret device guards every part of your automobile from spare tire to headlights and steering wheel. In your garage or on the street it is on the job 24 hours a day. Never sleeps, rests or gets tired. Already approved by insurance companies and motor associations. Now offered on 5-day test.

Puzzles Everyone!

THIS little, automatic "electric-watchman" invention is called "Devil-Dog." It is not only a new kind of device, it is an *entirely new idea!* Absolutely unique and utterly different than anything anyone ever saw before. So startling that it grips the imagination of everyone from the millionaire Rolls-Royce owner to the fellow who drives a second-hand Ford. Until he knows the secret every motorist will swear that you have someone hiding in your car. He just simply can't *believe* there can be such a device as this queer "electrical-watchman."

INSTALLED IN 10 MINUTES— COSTS NOTHING TO OPERATE

Every man who owns a car can afford Devil-Dog. Actually, no man who owns a car can afford to be *without* this inexpensive protection. Last year over 116,000 automobiles were stolen in this country. Millions of dollars' worth of spare parts were pilfered by sneak thieves. Now Devil-Dog

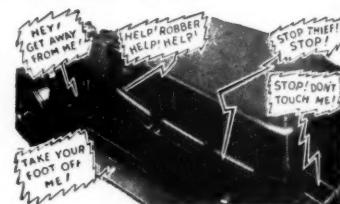
can be installed by anyone in ten minutes or less. There is absolutely no cost for operation. No extra batteries to buy. It will last as long as the car. And you hide the secret switch button anywhere you want to around your car. It's nothing but common sense for a man to grab Devil-Dog the very first time he sees it demonstrated. No wonder distributors already are cleaning up young fortunes!

5-DAY FREE TEST

I invite readers of this publication to send for the special 5-day test offer now being made on Devil-Dog. Test it. Show your friends. If your present income is less than about \$30 a week, profit opportunities as my spare-time or full-time representative may surprise you. My one condition is, I want men to help me quick! Write me today!

**AUTOMATIC
DEVIL DOG**

NORTHWEST ELECTRIC CORP.
Dept. C-490, Pukwana, So. Dak.



RECORD EARNINGS—\$138 IN A DAY!

Every Devil-Dog sale brings you a real profit. No penny-ante little business! That's another reason Devil-Dog is a *real* big money maker! G. Oliver, Illinois representative, reports, "Made \$138 in a day. This is the easiest way to make money quick I ever heard of. My next order will be for 1,000." That's the top record so far. Who will beat it first?

POLCY BUY FOR ARMORED CAR

Richard Jacques, Canada, just started, writes, "Here's our order for 24 Devil-Dogs. I have sold one to the police for their armored car. Am also getting letters from the Chief of Police and the Detective Department. Tomorrow we demonstrate to the motor league."

Northwest Electric Corp., Dept. C-490
Pukwana, So. Dak.

Rush territory details and your 5-day test offer without obligation.

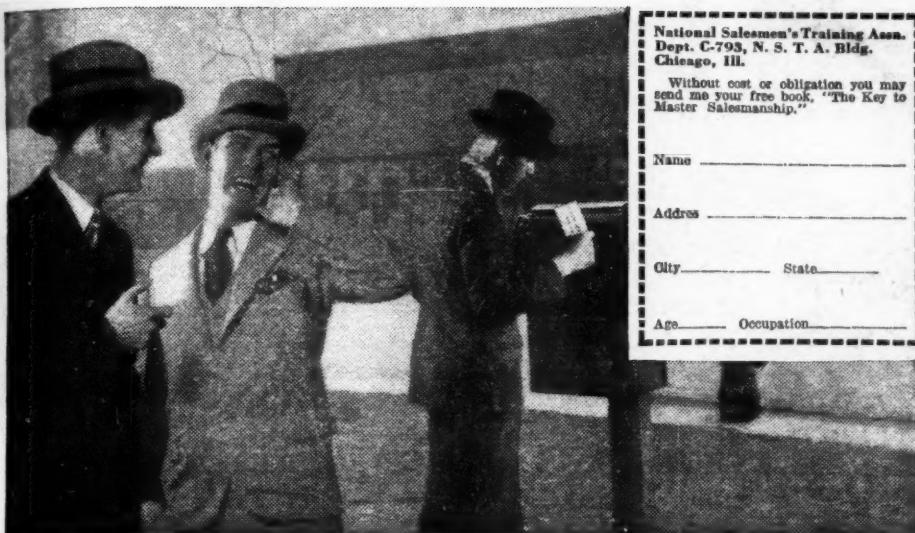
Name _____

Address _____

Town _____ State _____

I
to be
for a
pikers
Ed
"We
voice,
business
The
a job
specia
But
to Ed
"D
"get
here"
Sale
with
used
On
It co
ambit
men
will
out a
from

Re
and
sun
man
Nothing



National Salesmen's Training Assn.
Dept. C-793, N. S. T. A. Bldg.
Chicago, Ill.

Without cost or obligation you may send me your free book, "The Key to Master Salesmanship."

Name _____

Address _____

City _____ State _____

Age _____ Occupation _____

They Laughed When I Mailed This Coupon

..But It Brought Me The Book That Showed Me How to Make \$10,000 a Year!

A I walked up to the mail box, Joe nudged Ed and winked broadly for my benefit.

"Smile!" he hissed in a loud stage-whisper. "This is going to be the big turning point in Frank Parker's life! He's writing for a book that tells how to get into salesmanship. Pretty soon he'll be earning so much that he'll make the rest of us look like pikes!"

Ed snickered.

"Won't it be grand!" he grinned. "Now he can quit punching time-clocks and eating 40-cent lunches." He raised his voice. "Drop me a postal sometime when you get out into big business and start making \$10,000 a year, will you, Frank?"

They both laughed merrily. And probably it did seem like a joke to them that a \$30 a week clerk would have the nerve to think he could ever get anywhere or make real money without some special "gift" or "pull."

But they laughed too soon. Just yesterday I sat down and wrote to Ed who is still at the shop, dragging along at the same old job.

"Dear Ed"—I wrote. "You asked me to send you a card when I 'got into big business and started making \$10,000 a year.' Well, here's your card. Yesterday I was promoted to the job of assistant Sales Manager of the Western Metal Works, at a salary that goes with it. I'll loan you my copy of that book on salesmanship we used to think was such a joke."

Only a book! Just seven ounces of paper and printers' ink—but it contains one of the most vivid and inspiring messages that any ambitious man can read. It reveals the real truth about the art of selling, explains the science of selling in simple terms, and tells exactly how the great sales records of nationally-known star salesmen are made. Not only that—it outlines a simple plan that will enable almost any man to master scientific salesmanship without spending a moment on the road—without losing a day or a dollar from his present position.

A Few Weeks—Then Bigger Pay

Reason it out for yourself. Salesmanship offers bigger returns and delivers them quicker than any other line of work under the sun. But many people have subscribed to the foolish notion that a man has to be "born" with some sort of "gift" for salesmanship. Nothing could be farther from the truth. Just like any other profession, salesmanship is governed by certain fundamental rules and

laws—laws which you can master as easily as you learned the alphabet.

Right now an unusual demand for salesmen is being reported. Critical traveling sales positions are open in nearly every line all over the country. Last year requests for over 50,000 trained men were received. This employment service is free to both employers and employees, and thousands have secured excellent positions this way.

Free to Every Man

See for yourself why "The Key to Master Salesmanship" has been the deciding factor in the careers of so many men who are now making \$10,000 a year. See how Mark Barichievich of San Francisco, Calif., for example, jumped from \$8 a week as dish-washer to \$150 as salesman—and on how E. R. Harward of Chattanooga, Tenn., quit his job and consequently earning \$7,000. Learn for yourself the REAL truth about the art of selling! If we were asking \$2 or \$3 a copy you might hesitate. But the book is now FREE. You do not risk one penny nor incur the slightest obligation. And since it may alter your entire future, it certainly is worth your time to fill out and clip the coupon at the top of this page. Why not do it now!

National Salesmen's Training Association

Dept. C-793
N. S. T. A. Bldg. Chicago, Ill.



Where Shall
We Send Your
Copy FREE?

Mail Coupon Above Today

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

ASTOUNDING STORIES

20c



On Sale the First Thursday of Each Month

W. M. CLAYTON, Publisher

HARRY BATES, Editor

DR. DOUGLAS M. DOLD, Consulting Editor



The Clayton Standard on a Magazine Guarantees:

That the stories therein are clean, interesting, vivid, by leading writers of the day and purchased under conditions approved by the Authors' League of America;
That such magazines are manufactured in Union shops by American workmen;
That each newsmen and agent is insured a fair profit;
That an intelligent censorship guards their advertising pages.

The other Clayton magazines are:

ACE-HIGH MAGAZINE, RANCH ROMANCES, COWBOY STORIES, CLUES, FIVE-NOVELS MONTHLY, ALL STAR DETECTIVE STORIES, RANGELAND LOVE STORY MAGAZINE, WESTERN ADVENTURES, and WESTERN LOVE STORIES.

More Than Two Million Copies Required to Supply the Monthly Demand for Clayton Magazines.

VOL. V, No. 3

CONTENTS

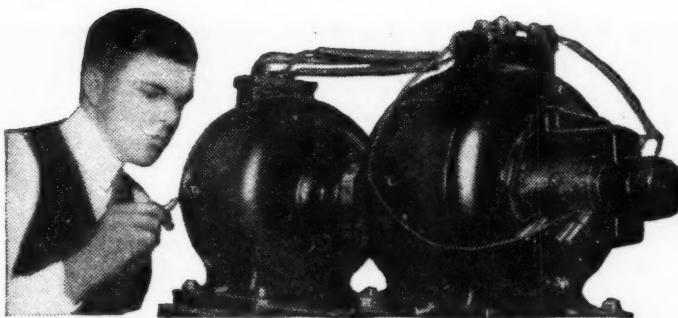
MARCH, 1931

COVER DESIGN	H. W. WESSO	
<i>Painted in Water-Colors from a Scene in "Beyond the Vanishing Point."</i>		
WHEN THE MOUNTAIN CAME TO MIRAMAR	CHARLES W. DIFFIN	297
<i>It is Magic against Magic As Garry Connell Bluffs for His Life with a Prehistoric Savage in the Heart of Sentinel Mountain.</i>		
BEYOND THE VANISHING POINT	RAY CUMMINGS	314
<i>The Tale of a Golden Atom—an Astounding Adventure in Size. (A Complete Novelette.)</i>		
TERRORS UNSEEN	HARL VINCENT	360
<i>One after Another the Invisible Robots Escape Shelton's Control—and Their Trail Leads Straight to the Gangster Chief Cadorna.</i>		
PHALANXES OF ATLANS	F. V. W. MASON	376
<i>Never Did an Aviator Ride a More Amazing Sky-Steed Than Alden on His Desperate Dash to the Great Jarmuthian Ziggurat. (Conclusion of a Two-Part Novel.)</i>		
THE METEOR GIRL	JACK WILLIAMSON	404
<i>Through the Complicated Space-Time of the Fourth Dimension Goes Charlie King in an Attempt to Rescue the Meteor Girl.</i>		
THE READERS' CORNER	ALL OF US	417
<i>A Meeting Place for Readers of Astounding Stories.</i>		

Single Copies, 20 Cents (In Canada, 25 Cents)

Yearly Subscription, \$2.00

Issued monthly by Readers' Guild, Inc., 80 Lafayette Street, New York, N. Y. W. M. Clayton, President; Francis P. Pace, Secretary. Entered as second-class matter December 7, 1929, at the Post Office at New York, N. Y., under Act of March 3, 1879. Title registered as a Trade Mark in the U. S. Patent Office. Member Newsstand Group—Men's List. For advertising rates address E. R. Crowe & Co., Inc., 25 Vanderbilt Ave., New York; or 226 North Michigan Ave., Chicago.



Amazingly Easy Way to get into ELECTRICITY

Don't spend your life waiting for \$5 raises, in a dull, hopeless job. Now . . . and forever . . . say good-bye to 25 and 35 dollars a week. Let me show you how to qualify for jobs leading to salaries of \$50, \$60 and up, a week, in Electricity—NOT by correspondence, but by an amazing way to teach, RIGHT HERE IN THE GREAT COYNE SHOPS. You become a practical expert in 90 days! Getting into Electricity is far easier than you imagine!

Learn Without Lessons in 90 DAYS

By Actual Work—in the Great Shops of Coyne

Lack of experience—age, or advanced education bars no one. I don't care if you don't know an armature from an air brake—I don't expect you to! I don't care if you're 16 years old or 48—it makes no difference! Don't let lack of money stop you. Most of the men at Coyne have no more money than you have.

EARN WHILE YOU LEARN

If you should need part-time work while at school to help pay expenses, I'll assist you to it. Then, in 12 brief weeks in the great roaring shops of Coyne, I train you as you never dreamed you could be trained . . . on a gigantic outlay of electrical apparatus . . . costing hundreds of thousands of dollars . . . real dynamos, engines, power plants, autos, switchboards, transmitting stations . . . everything from doorbells to farm power and lighting . . . full-sized . . . in full operation every day!

NO BOOKS

No Printed Lessons

No books, no baffling charts . . . all real actual work . . . right here in the great Coyne school . . . building real batteries . . . winding real armatures . . . operating real motors, dynamos and generators, wiring houses



Prepare for Jobs Like These

Here are a few of hundreds of positions available at Coyne's menmen. Our free employment bureau gives you lifetime employment service.

Armature Expert up to \$100 a Week

Substation Operator up to \$100 a Week

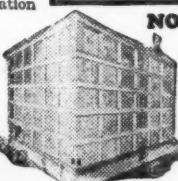
Auto Electrician \$75 a Week

Inventor up to \$150 a Week

Maintenance Engineer up to \$150 a Week

Service Station Operator up to \$200 a Week

Radio Expert up to \$100 a Week



NOW IN OUR NEW HOME

This is one of the finest, most modern buildings we have ever installed. It contains thousands of dollars' worth of the newest and most modern Electrical equipment of all kinds. Every comfort and convenience has been provided to make you happy and contented during your training.

COYNE ELECTRICAL SCHOOL
H. C. LEWIS, President
500 S. Paulina Street, Dept. 31-66, Chicago, Ill.

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

etc., etc. That's a glimpse of how we make you a master practical electrician in 90 days, teaching you far more than the average ordinary electrician ever knows and fitting you to step in to jobs leading to big pay immediately after graduation. Here, in this world-famous Parent school—and nowhere else in the world—can you get this training!

Jobs, Pay, Future

Don't worry about a job, Coyne training settles the job question for life. Demand for Coyne men often exceeds the supply. Our employment bureau gives you a lifetime service. Two days after graduation Clyde F. Hart got a position as electrician for the Great Western Railroad at over \$100 a week. That's not unusual. We can point to Coyne men making up to \$600 a month. \$60 a week is only the beginning of your opportunity. You can go into radio, battery, or automotive electrical business for yourself and make up to \$15,000 a year.

Get the Facts

Coyne is your one great chance to get into electricity. Every obstacle is removed. This school is 30 years old—Coyne training is tested—proven beyond all doubt—endorsed by many large electrical concerns. You can find out everything absolutely free. Simply mail the coupon and let me send you the big, free Coyne book of 150 photographs . . . facts . . . jobs . . . salaries . . . opportunities while training and how we assist our graduates in the field. This does not obligate you. So act at once. Just mail coupon.

Get This Free Book



Mr. H. C. LEWIS, President
Coyne Electrical School, Dept. 31-66
500 S. Paulina Street, Chicago, Illinois

Dear Mr. Lewis:

Without obligation send me your big free catalog and all details of your Free Employment Service, Radio, Aviation Electricity, and Automotive Courses, and how I can "earn while learning."

Name

Address

City State



"Stay home—and gargle with Listerine every 2 hours"

THAT is what your doctor would probably tell you to do if you had an ordinary cold or simple sore throat. Combined with rest and warmth, it is an excellent treatment. Over and over again this has been proved in the past 50 years.

These ailments are caused by germs multiplying by millions in the mouth and throat. They are continually striving to overcome the forces of health in your body. They often succeed when body resistance is lowered by such things as wet feet, fatigue, lack of exercise, exposure to draughts, cold, sudden changes of temperature.

Their names are Streptococcus Hemolyticus (the streptococcus germ), Staphylococcus Aureus (pus), and Bacillus Influenzae.

Reduces mouth germs 98%

And undiluted Listerine, used as a gargle, kills these germs—all germs—almost instantly. In 15 seconds to be exact—the fastest time science has been able to measure accurately.

Repeated tests, similar to those employed

at great universities, show that it actually reduces the bacteria on the surfaces of the mouth 98%. And at the same time soothes and heals inflamed membrane.

As a precaution

As a precaution against colds and irritated throat, gargle with undiluted Listerine every morning and every night. And when these have actually gained a foothold, increase the gargle to once every 2 hours, meanwhile consulting your physician.

The wonderful thing about Listerine is that while a potent germicide, it is at the same time non-poisonous, safe to use, pleasant to taste, and healing to tissue. Keep Listerine in home and office and carry it when you travel. At the first symptom of trouble use it undiluted to get full germicidal effect. Lambert Pharmacal Company, St. Louis, Mo., U. S. A.



KILLS 200,000,000 GERMS IN 15 SECONDS—HEALS TISSUE

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

V
5
—
3

M
A
R

3
1

XUM



-and Get Into One Of these BIG PAY FIELDS!

— LEARN ELECTRICITY — Prepare for a Big-Pay Job!

YOU CAN EARN \$50, or \$75 or even \$100 a week, or more, prepare for one of the *Big-Pay Electrical Jobs Now Open*. World Famous National System of *Actual Shop Practice* qualifies you without previous experience.

Learn in Our Big Shops in a Few Months
Get real experience at National. Do the actual work yourself. *No Books Used. No Tools to Buy*. We furnish everything. Large force of expert instructors aid you. No tiresome lectures. *Learn quickly*, in few months under *Exclusive National method*. *Good Jobs Ready Everywhere* when you graduate. Diplomas issued certifying your ability. Employers ask for National trained men.

Earn Expenses Easily While Learning
Without it costing you one cent we will get you a part-time job to earn your room and board while learning. Only cost to you is low tuition fee. We have many after school jobs *Open Right Now!* Come at once while demand for trained men is greatest. Life-time scholarships issued every student. *Free employment service* when you graduate. No trouble to find good jobs. No cost to you at all. California now spending Millions in electrical and auto developments. *Enroll Now!*



— LEARN — AUTOS — in California! Many Jobs Ready

MORE AUTOS IN CALIFORNIA THAN ANYWHERE. Big-Pay jobs waiting for trained men. We teach you quickly. Real experience on up-to-date automobiles. \$100,000 invested in late model cars alone. 10 big training departments. All included in *one tuition fee*. Earn up to \$85 a week or run your own business. We help you get started.

Highest Quality Training Given

We do not boast of fifty or sixty thousand graduates although we have been established 25 years...longer than most schools. We train less than 1,000 men per year. But we train them right. No Book Work. Practical shop experience only. We train for the big pay positions. No large classes. Individual instruction on fine equipment. No time limit. Men any age can learn quickly.

Less Than Three Months Required

Complete course in less than three months, includes all automotive work. Machine shop, battery, ignition, electrical systems, etc. all included at one price.

Railroad Fare Allowed! Investigate At Once!
Write today for the whole story. Our big free book with full details sent FREE. Don't lose another minute! These offers are necessarily limited for a short time. Mail coupon, and soon you will be on the train for Los Angeles!

NATIONAL SCHOOLS

Electrical and Auto
4006 Figueroa St., Los Angeles, Calif.

IF INTERESTED IN ELECTRICITY Write Name
Here & Mail

IF INTERESTED IN GOOD AUTO JOB Fill Out & Mail
This Coupon

National Electrical Schools,
Dept. 323-X 4006 Figueroa St., Los Angeles, California
Gentlemen Please rush Free Electrical Catalog and details of
Free Railroad Fare Offer.

Name.....

Address.....City.....

National Electrical Schools,
Dept. 323-X 4006 Figueroa St., Los Angeles, California
Gentlemen Please rush Free Auto Catalog and details of Free
Railroad Fare Offer.

Name.....

Address.....City.....

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements



RCA INSTITUTES *trains men in* **RADIO**

MEN who need radio training... who wish to know all about radio servicing, radio telephony and telegraphy and broadcasting, can quickly obtain this valuable knowledge through RCA Institutes and its famous Home Laboratory Training Course.

Radio Instruction by America's Oldest and Foremost Radio Training School

You can study at home in your spare time or at any of the RCA Institutes resident schools throughout the country. Thorough and reliable training given you. As a student you also receive the complete RCA Institutes Laboratory Equipment... enabling you to easily solve radio problems at home in your spare time. This is the recognized way to speedily acquire the commercial knowledge and ability demanded in Radio today.

Free Book for Ambitious Men

Send for this free book... many pages of pictures and text giving full details about the Home Laboratory Training Course... the RCA Institutes Laboratory Equipment... RCA Institutes and the noted staff of instructors... that have helped thousands of men to make good in Radio.



RCA INSTITUTES, Inc.

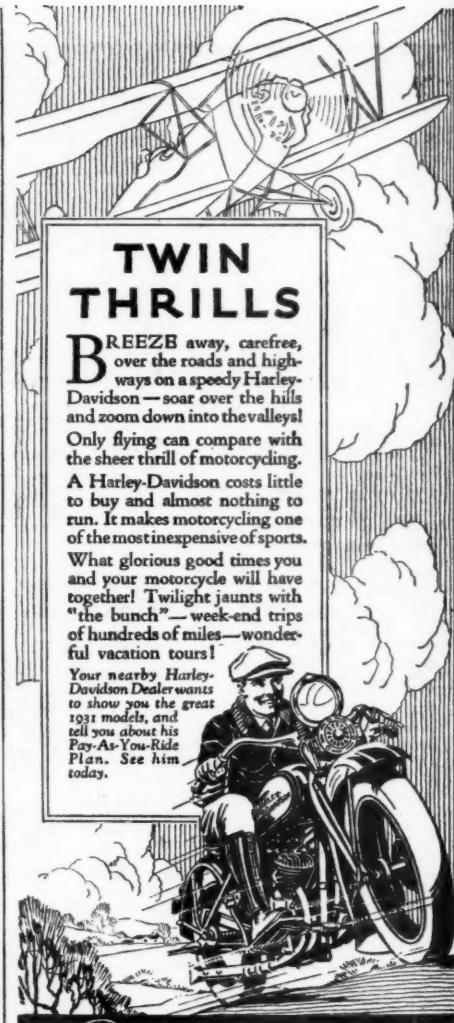
RCA INSTITUTES, Inc.,
Dept. GN-3
75 Varick St., New York, N.Y.

Gentlemen: Please send me your big FREE book which tells about the many opportunities in Radio and about your famous laboratory method of radio instruction at home.

Name _____

Address _____

Occupation _____



TWIN THRILLS

BREEZE away, carefree, over the roads and highways on a speedy Harley-Davidson — soar over the hills and zoom down into the valleys! Only flying can compare with the sheer thrill of motorcycling. A Harley-Davidson costs little to buy and almost nothing to run. It makes motorcycling one of the most inexpensive of sports. What glorious good times you and your motorcycle will have together! Twilight jaunts with "the bunch" — week-end trips of hundreds of miles — wonderful vacation tours!

Your nearby Harley-Davidson Dealer wants to show you the great 1931 models, and tell you about his Pay-As-You-Ride Plan. See him today.

Mail Coupon for Free
Literature

HARLEY-DAVIDSON

MAIL THE COUPON

HARLEY-DAVIDSON MOTOR CO.
Dept. N. S. G., Milwaukee, Wis.

Interested in your motorcycles. Send literature.

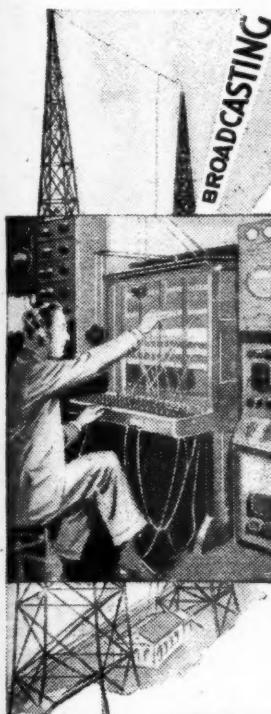
Name _____

Address _____

My age is 16-19 years, 20-30 years,
 31 years and up, under 16 years.
Check your age group.

V
5
3

M
A
R



BROADCASTING

TELEVISION

TALKING PICTURES

WIRELESS OPERATING

WIN FAME and FORTUNE in RADIO!

Don't spend your life slaving away in some dull, hopeless job! Don't be satisfied to work for a mere \$20 or \$30 a week. Let me show you how to make REAL MONEY in RADIO—THE FASTEST-GROWING, BIGGEST MONEY-MAKING GAME ON EARTH.

THOUSANDS OF JOBS ARE OPEN

Paying \$60, \$70 and on up to \$200 a Week

Jobs as Designer, Inspector and Tester, paying \$3,000 to \$10,000 a year—as Radio Salesman and in Service and Installation Work, at \$45 to \$100 a week—as Operator or Manager of a Broadcasting Station, at \$1,800 to \$5,000 a year—as Wireless Operator on a Ship or Airplane, as a Talking Picture or Sound Expert—THOUSANDS of JOBS Paying \$60, \$70 and on up to \$200 a WEEK!

Learn Without Lessons in 60 Days

You learn ALL branches of Radio at Coyne—in 8 short, pleasant weeks—NOT BY CORRESPONDENCE, but by actual work on actual Radio, Television and Sound equipment. We don't waste time on useless theory. We give you just the practical training you'll need—in 8 weeks' time.

No Books - No Lessons

All Practical Work at Coyne

Coyne is NOT a Correspondence School. We don't teach you from books or lessons. We train you on the greatest outlay of Radio, Television and Sound equipment in any school—on scores of modern Radio Receivers, huge Broadcasting equipment, the very latest Television apparatus, Talking Picture and Sound Re-

production equipment, Code practice equipment, etc. You don't need advanced education or previous experience. We give you—right here in the Coyne Shops all the actual practice and experience you'll need.

TELEVISION

Is on the Way!

And now Television is on the way! Soon there'll be a demand for THOUSANDS of TELEVISION EXPERTS! The man who learns Television NOW can make a FORTUNE in this great new field. Get in on the ground-floor of this amazing new Radio development! Learn Television at COYNE on the very latest, newest Television equipment.

TALKING PICTURES

A Great Field

Talking Pictures and Public Address Systems offer thousands of golden opportunities to the Trained Radio man. Here is a great new field

of Radio that has just started to grow! Prepare NOW for these marvelous opportunities! Learn Radio Sound work at Coyne, on actual Talking Picture and Sound Reproduction equipment.

COYNE Is 31 Years Old

Don't worry about a job! Coyne Training settles the job question for life. You get Free Employment Help as long as you live! And if you need part-time work while at school to help pay expenses we'll gladly help you get it. Coyne is 31 years old! Coyne Training is tested—proven beyond all doubt. You can find out everything, absolutely free. Just Mail Coupon for My Big Free Book.

**H. C. LEWIS, President
Radio Division, Coyne Electrical School
500 S. Paulina St., Dept. 31-SE, Chicago, Ill.**

Send me your Big Free Radio Book and all details of your Special Introductory Offer. This does not obligate me in any way.

Name.....

Address.....

City..... State.....

H. C. LEWIS, Pres. **Radio Division**
Coyne Electrical School
500 S. Paulina St. **Founded 1899**
Dept. 31-SE, Chicago, Ill.

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements



"SELDOM SEE AN I. C. S. GRADUATE OUT OF A JOB"

"IN ALL the years I have known of the International Correspondence Schools, I have seldom seen one of your graduates out of a job."

A business executive made this statement in a recent letter commenting on the I. C. S. graduates and students in his employ and expressing regrets that it is necessary to reduce the personnel of his organization.

"However," he added, "all I. C. S. graduates and students will be retained, for I realize their value in the conduct of my business."

The reason I. C. S. men always have jobs is because they are *trained men!* You, too, can be an I. C. S. man. In this age of efficiency and specialization, to be an I. C. S. man means security for the present and assurance for the future.

Mark the subject in which you are most interested. Mail the coupon *today*. There is no cost and no obligation in doing so. Yet it has been the most important act in thousands of men's lives!

INTERNATIONAL CORRESPONDENCE SCHOOLS

INTERNATIONAL CORRESPONDENCE SCHOOLS, "The Universal University," Box 2114-F, Scranton, Penna.
Without cost or obligation, please send me a copy of your booklet, "Who Wins and Why," and full particulars about the subjects before which I have marked X:

TECHNICAL AND AVIATION COURSES

- Architect
- Architectural Draftsman
- Building Contracting
- Ware Millwork
- Contractor and Builder
- Structural Draftsman
- Structural Engineer
- Electric Wiring
- Electrical Engineers
- Heating and Cooling
- Welding, Electric and Gas
- Reading Shop Blueprints

- Telegraph Engineer
- Telephone Work
- Mechanical Engineer
- Machine Draftsman
- Machinist
- Toolmaker
- Pattermaker
- Pipefitter
- Timsmith
- Bridge Engineer
- Building Building Foreman
- Gas Engines
- Diesel Engines

- Aviation Engines
- Automobile Mechanics
- Plumbing and Fitting
- Heating and Ventilation
- Sheet Metal Worker
- Steam Engineer
- Steam Electric Engineer
- Civil Engineer
- Surveying and Mapping
- R. R. Locomotives
- R. R. Section Foreman

- R. R. Bridge and Building Foreman
- Air Brake and Train Operation
- Highway Engineering
- Ship Building Pharmacy
- Coal Mining Engineer
- Navigation
- Boilermaker
- Textile Overseer or Sup't.
- Cotton Manufacturing
- Woolen Manufacturing
- Agricultural Farming
- Poultry Farming
- Radio
- Marine Engineer

BUSINESS TRAINING COURSES

- Business Management
- Office Management
- Industrial Management
- Personnel Management
- Traffic Management
- Accountancy
- Cost Accountant
- C. P. Accountant
- Bookkeeping
- Secretarial Work
- Spanish
- French
- Salesmanship
- Advertising
- Business Correspondence
- Lettering Show Cards
- Stenography and Typing
- Complete Commercial
- Civil Service
- Mail Carrier
- Railway Mail Clerk

- Grade School Subjects
- High School Subjects
- College Preparatory
- Illustrating
- Cartooning
- Lumber Dealer

Name..... Age..... Address.....

City..... State..... Occupation.....

If you reside in Canada, send this coupon to the International Correspondence Schools Canadian, Limited, Montreal, Canada

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements



"That'll be all from you," he told the black one.

When the Mountain Came To Miramar

By Charles W. Diffin

THE first tremor that set the timbers of the house to creaking brought Garry Connell out of his bunk and into the middle of the floor. Then the floor heaved and adobe walls swayed while the man fought to keep his footing and pull himself through the doorway to the safety of the dark night. The earthquake that

came with the spring of 1932 was on.

He was nauseated with that deathly sickness that only an earthquake gives, and he dropped breathlessly in the shelter of a date palm while the earth beneath him rolled and groaned in agony. A deeper roar was rising above all other sounds,

and Connell looked up at the nearby top of Sentinel Mountain.

It is magic against magic as Garry Connell bluffs for his life with a prehistoric savage in the heart of Sentinel Mountain.

The stars of the desert land showed clear; the grim blackness of Sentinel's lone peak rose abruptly from the sand of the desert floor in darker silhouette against the velvet of a midnight sky. And the mountain was roaring.

Softened by the distance, the deep, grumbling bass sang thunderingly through and above the other noises of the night, as if old Sentinel itself were voicing its remonstrance against this disturbance of its age-long rest.

The grumbling died to a clatter of falling boulders a hundred yards away at the mountain's base, and Connell's eyes discerned a puff of vaporous gray, a cloud of wind-blown dust, high up on the mountain's flank.

"Holy cats!" said Garry explosively, "what a slide! That must have ripped the old boy wide open."

His eyes followed the white scar far up on the mountainside, followed it down to the last loosened stones that had crashed among the date palms of Miramar ranch. "I don't just like the idea of the whole mountain moving in on me," he told himself; "I'll have to go up and look at that to-morrow."

IT was afternoon of the following day when Garry rolled blankets and food into a snug pack and prepared for the ascent. "Guess likely I'll sleep out to-night," he mused and looked at the pistol he held in his hand.

"I don't want that thing slapping against me," he argued; "too darned hot! And there's nothing to use a gun on up on Sentinel. . . . Oh, well!" He threw the holster upon his bunk and dropped the automatic into the pack he was rolling. "I'll take it along. Might meet up with a rattler."

He brushed the sandy hair from his wet forehead and straightened to his full six feet of slender height before he slipped the straps of his pack about his shoulders. And a broad grin made pleasant lines about his gray eyes as he realized the boyish curiosity that was driving him to a stiff climb in the heat of the day.

There was no real trail up the thousand-foot slope of Sentinel Mountain. Prospectors had been over it, doubtless, in earlier days, but in all of Garry's twenty-one years no one beside himself had ever made the ascent.

There was nothing in all that solitary, desolate peak to call them; nothing, for that matter, to beckon Garry, except the hot desert days, the cool breath of evening and the glory of nights when the stars hung low over all the miles of sand and sagebrush that reached far out to the rippling sand-dunes shimmering in the distance. Nothing, that is, but the "feel" of the desert—and young Garry Connell was desert-born and bred.

He stopped once and dropped his pack while he mopped his wet face. From this point he could see his own ranch spread below him. Miramar, he had named it—"Beautiful Sea." The name was half an affectionate mockery of this land where the nearest water was fifty miles away, and half because of the sea of blue that he looked at now. Garry had never ceased to wonder at the mirage.

It was always the same in the summer heat—a phantom ocean of water. Garry's eyes loved to follow the quivering blue expanse that seemed so cool and deep. It rippled softly away to end in a line of white, like distant breakers on the horizon's rolling dunes.

This had been the bed of an ocean in some distant past, and that ancient ocean could never have seemed more real than this; yet Garry knew that this sea would vanish with the setting sun. He had watched it often.

AHUNDRED yards farther and he stopped again. It was no well-trodden path that Garry followed, but he knew his landmarks. There was the big split rock a half mile ahead, and the three-branched cactus beside it. But between these and the place where Garry stood was a fan-shaped sweep of boulders—and this where smooth going had been before.

He forgot for the moment all discomfort. He stood staring under the hot sun that cast purple shadows beside the weathered rocks, and his eyes followed up the scarred mountainside.

"That whole ledge that stood out up there—that's gone!" he told himself. "The whole side of the mountain just shook itself loose. . . ."

Far above, his eyes found another towering mass that reared itself menacingly. "That will come down next time," he said with conviction, "and I don't want to be under it when it breaks loose." Then his searching eyes found the lower ledge and its shattered remains.

It had held a welter of rocks above it as a dam holds the pressure of water—and the dam had burst. The torrent of stone from above had swept into motion and carried with it the accumulation of loose rubble below. Where the ledge had been was now a cliff—a sheer wall of rock. It had been covered before by the talus that was swept away.

Garry's eyes narrowed to see more plainly under the sun's glare. He was staring not alone at the cliff but at a shadow within it—a black shadow in the white face of the cliff itself.

"That was all covered up before," Garry stated; "buried for thousands of years, I suppose. But it can't be a cave; not a natural one, at least. There are no caves in this rock."

He stopped at times for breath, and his wonder grew as he climbed and the black mark took clearer form. At last he stood panting before it, to stare deep into the utter blackness of a passageway beyond an entrance of carved stone.

It was carved; there was no mistaking it! Here was a passage that nature had never formed. He took a quick stride forward to see the tool marks that showed on hard walls where symbols and figures of strange design were carved. An intrusion of harder rock had formed a roof, and they had cut in below—

"They!" He spoke the word aloud. Who were "they?"

HE remembered the scientist who had stopped at the ranch some time before, and he recalled enough of the talk of Aztec and Toltec and Mayas to know that none of these old civilizations could explain the things he saw.

"This goes way back beyond them—it must," he reasoned. And there were pictures, long forgotten, that came to his mind to show him a vision from the past—figures whose coppery faces shone dark above their brilliant, colored robes—slaves, toiling and sweating to drive this tunnel into solid rock. He was suddenly a-quiver with a feeling of the presence of living things. His breath seemed stifled within him as he stepped into the dark where a pencil of light from his pocket-flash made the blackness more intense.

He tried to shake off the feeling, but an indefinable oppression was heavy upon him; the weight of the uncounted centuries these walls had seen filled him with strange forebodings.

His feet stumbled and scuffed over chips of stone; he steadied himself against the wall at times as he followed the corridor that went down and still down before him. It turned and twisted, then leveled off at last, and Garry Connell drew himself up sharply with a quick-drawn breath.

His flash was making a circle of light a dozen steps ahead, and showed a litter of sharp stone fragments. And, scattered over them, a tangle of bones shone white; one skull stood upright to stare mockingly from hollow sockets. The sudden white of them was startling in the black pit.

"Bones!" he said, and forced himself to disregard the echoes that tried to shout him down; "just bones! And the old-timers that wore them haven't been using them for thousands of years." He moved forward with determined steps to the end of the passage that finished in solid stone. He stopped abruptly. At closer range was some-

V
5
3
M
A
R
3
1
XUM

thing that froze him to a tense, waiting crouch.

This wall of solid stone—it was not solid as it had seemed. There was a doorway; the stone was swung inward; and at one side in a straight-marked crack, he saw a thread of light.

He snapped off his own flash. Someone was there! Someone had beaten him to it! He held himself crouched and rigid at the thought. But who could it be? The utter silence and the steady, unchanging, pale-green light showed him the folly of the thought. There was no one there; there couldn't be anyone.

HIS hand, that trembled with excitement, reached across and over the skeleton remains posted like a ghostly guard before the door. He threw his weight upon the stone.

Its bearings groaned, but it moved at his touch. The stone swung slowly and ponderously into a silent room, and Garry Connell stared wide-eyed and wondering where rock walls, in carved and colored brilliance reflected the softest of diffused light.

A great room, hewn from the solid rock!—and Garry tried to see it and all that it held at one glance. He grasped the extent of the stone vault, a hundred feet across; the distant walls were plain in the soft light.

One high point of flashing color caught his eye and held it in marveling amazement. A thing of beauty and grace. It was a shining, silvery shape like a mushroom growth; it towered high in air, almost to the ceiling, a slender rod that swelled and opened to a curved and gleaming head. Graceful as a fairy parasol, huge enough to shelter a giant, it was like nothing he had ever seen.

But there was no time now for conjectures. He made no effort to understand; he wanted only to see what might be here; and his eyes flashed quickly over sculptured walls and a stone floor where metal boxes were arranged in orderly rows.

Hundreds of them, he estimated; huge cases, some eight or ten feet long. Two nearby were raised above the floor on bases of carved stone. Lusterless gray in color—metal, unmistakably—and in them....

"No use getting all hopped up over treasure hunting," Garry had told himself. But under all his incredulous amazement had been flickering thoughts of what he might find.

He stared hungrily at those two boxes near him. Each of the hundreds was big enough to hold a fortune. He reached for a metal bar beside the scattered bones, and, like a man in a sleep-walking dream, he stepped across those relics of earlier men and entered the room that they had guarded.

The light stopped him for a moment. He puzzled over it; stared wonderingly at a circle of glowing radiance in the roof of stone. It reminded him of something . . . the watch on his wrist . . . yes, that was the answer—some radio-active substance. His eyes came back to the nearest chest, and he jammed the point of his corroded bar beneath the flange of a tight-fitting lid.

THE hidden room was cool, but Garry Connell wiped the sweat from his eyes when he ceased his frantic efforts. The metal bar clanged loudly upon the floor beside him. He stood, breathing heavily, his eyes on the metal cover that refused to move. And in the silence there came to him again that strange, prickling apprehension. He caught himself looking quickly behind him as if to find another person there.

His eyes were accustomed now to the pale light, and the sculptured figures on the walls stood out with startling distinctness. Garry turned to look at the nearer wall and the figure that was repeated over and over again.

It was a man, tall and lean, his robes, undimmed by the years, blazed in crimson and gold. But the face above! Garry shivered in spite of himself at the devilish ugliness the artist had copied. It was dead black in color, with slitted

eyes that had been touched up artfully to bring out their venomous stare. The head itself rose up to a rounded point that added to the inhuman brutality of the face.

He was seated on a throne, Garry saw, and other figures, less skilfully carved, were kneeling before him. Again, he was standing above a prostrate enemy, a triple-pointed spear raised to deliver the final blow.

Silently, Garry let his eyes follow around the room with its repetition of the horrible being who was evidently a king. Then he whistled softly. "Nice kind of hombre, he must have been," he said. And, "Boy," he told the carved image familiarly, "whoever you were, you've been dead a long time, and I don't mind telling you I'm glad of it."

He was slowly circling the first casket. Beyond it was the slender rod with its mushroom head that seemed more like a bell as he looked from below. The head's inner surface was blazoned, like the figures on the wall, with crimson and gold in strange designs. He saw now that the base of it was connected with a smaller box, placed like the two beside it on a stone pedestal.

He came slowly beside it to study the box with narrowed eyes. He expected the metal cover would be as immovable as the others, and he started back and caught his breath sharply as the metal raised at his touch and the green radiance from above flashed back from within the box in a thousand scintillant lights. Then he stooped to see the brilliant, silvery sheen of metal wheels that moved on jeweled bearings.

A MECHANISM of some sort—but what? he wondered. He had some knowledge of the stream of electrons that discharged continuously from the light above, and he knew how they could charge an electroscope that would automatically discharge to produce motion. He nodded in half-understanding as the fluttering gold-leaf

fell and allowed a tiny wheel to move one notch in its escapement.

"Clockworks!" he told himself—it was as near as he could come to a name for the machine—"and it's been running here all this time. . . . What for, I wonder? What was it supposed to do?"

He stared again at the bell-shape towering above him, but its purpose was beyond guessing: it was a part of the machine. His eyes came back to the mechanism itself. There was a splinter of stone. . . . Garry reached for it unthinkingly, but his hand was checked in mid-air.

The fragment was wedged beneath a tiny lever, holding it erect. "That's the answer," Garry whispered. "The machine was left open,"—he felt of the cover that had been dented by some heavy blow, and saw sharp splinters of rock beneath his feet—"a rock fell from the roof, flaked off and dropped onto the machine, and a splinter jammed this little lever. But the machine has been ticking along. . . ."

His fingers reached for the stone. "Let's go!" he said, and grinned broadly at the thoughts that were in his mind. "Let's see what the machine would have done!"

The fragment came away within his hand, and he saw the lever fall slowly. There was motion within the case—wheels and shining spheres that touched one upon another were spinning in gleaming circles of silvery green—and from above he heard the first faint whisper of a sound.

It came from the bell, and Garry drew back to stare upward. The first soft humming of the clear bell-note was incredibly sweet. It rose in pitch while the volume increased, till the musical note was lost in the rising roar that resounded from walls and roof. Higher it rose; it was a scream that was human in its agony, prodigious in its volume!

GARRY CONNELL stood trembling with unnamed fear. This sound was unbearable; it beat upon his

V
5
3
M
A
R
3
1
XUM

ears; it battered his whole body; it searched out every quivering nerve and tore at it with fingers of fire. Still higher!—and the scream was piercing and torturing his brain. He felt the jerk of uncontrollable muscles.

The whirling machine was a blur of light, and he longed with every fibre of his tortured mind to throw himself upon it—into it!—anything to end the unbearable impact from on high. His body, assailed by a clamor that was physical torment, could not move; the vibrations beat him down with crushing force, while the shrieking voice rose higher, then grew faint, and, with a final whisper, died to nothingness.

And still Garry felt himself sinking; the room was blurred; the excruciating agony of tortured nerves melted into a lethargy that swept through him. Dimly he sensed that the monstrous, quivering, bell-topped thing was still launching its devastating rain of vibrations; they were above the range of hearing; but he felt his body quivering in response to the unheard note. Then even these vague fragments of understanding left him. The towering, soundless thing was indistinct . . . it vanished in the darkness that closed about. . . .

He was upon the floor in a crouching heap when the tremors that shook him ceased. His mind, in the same instant, was cleared, and he knew that the soundless vibrations from the bell had ended. A wave of thankfulness flooded through him, and he luxuriated in the utter silence of the room—until that silence was broken by another sound.

It was hard and metallic, like the click of a withdrawn bolt, and came first from the case at his side. A second sharp rap replied from the other raised casket, then an echoing tattoo of metallic impacts rattled and clattered in the resounding room. Each of the hundreds of caskets was adding its voice to the clacking chorus.

THE paralysis that had held Garry's muscles was gone, and he came slowly to his feet to see the edge

of the cover he had tried vainly to move, rising smoothly in the air. His eyes darted about; the second casket was opening; beyond were countless others; the room was alive with silent motion where metal lids lifted like petals of flowers unfolding to the sun.

The machine had done it! The conviction came to him abruptly. Those vibrations that had beaten him down had done this: some unlocking mechanism within each case had been actuated when the vibrations reached the proper pitch. Then the thoughts were driven from his mind by a more thrilling conviction: The caskets were open! The treasure! Who could know what some of them might contain? He took one quick step toward the nearer of the two.

One step!—and his reaching hands stopped motionless above the open case. The contents of the box were plain before him—and he stared in horror at the black, half-naked figure of a man as silent and unmoving as its counterpart upon the wall.

Black as a carving in ebony, it was the face that held Garry's eyes. He saw the pointed head, the thin lips half-drawn from snarling teeth, the expression of brutal savagery that even this frozen stillness could not conceal.

The eyes were closed; Garry saw their slitted lids. He was looking at them when they quivered and twitched. The lids opened slowly, drew back from staring eyes that were cold and dead—eyes that came suddenly to life, that turned and stared unwinkingly, horribly, into his.

GARRY'S lips were moving as he drew back in slow retreat, but he heard no sound of his own voice, only a husky whisper that said over and over again: "Mummies! Caskets of mummies! And they're coming back to life!"

Suspended animation. He had heard of such things. Dim, fleeting remembrance of what he had read came flashingly to him—toads that had lived a

thousand years sealed up in rock—but this, a human thing, a man!—no, no!—it couldn't come to life; not after all this time!

The pointed head, the ugly, menacing face and the body of dead black that rose slowly within the casket gave his argument the lie. In dreadful, living reality he saw the thing before him as it stretched its corded neck, extended and flexed its long, black arms and breathed deeply through lips drawn thin. Then, with a bound of returning energy, it leaped out and down to stand half-naked and black, towering threateningly above his head.

And Garry, too stunned to feel a sense of fear, looked first at the living face before him and then at the carvings done in stone. There was too much here for instant comprehension; his reason could not follow fast enough where facts were leading, and his mind seemed groping for some certain, proven thing.

"It's the same one that's on the wall," he explained painstakingly to himself. "It's the king, the old boy himself! I said he would be a bad hombre; I said he was a bad one—"

He saw the other raise his hands threateningly, and he crouched to meet the attack. But the black hands dropped, and the scowling face turned, while Garry's eyes followed toward a sound of movement in the second casket.

The green light flooded down, and Garry Connell glanced quickly at the doorway. Too many of these blacks and this would be no safe place for him. He was expecting another apparition like the first; he would have thought himself prepared against any further surprise, but his gray eyes opened wide at what the light disclosed.

THERE was the casket, gray and lusterless on its low, stone base. Its cover, like the others, stood erect, and above the nearer edge an arm was raising. But it was a white arm, and

it ended in a slim, white hand!—its rounded softness held in clear outline against the background of gray, until the arm fell that the hand might grip the metal edge.

Garry's eyes held in wondering fascination upon those slender white fingers. The hand of a woman—a girl!—what marvel of miracles was this? He held his silent pose while he stared at the face that appeared before him.

It was milk-white against the dull gray metal beyond, the white of death itself, until returning circulation brought a flush of pink that crept slowly to the rounded cheeks. Dark hair cascaded about the shoulders to mingle with a lacy veil of golden threads. A film of golden lace wrapped about her—her robes had gone to dust, vanished with the vanished years—and only the threads of gold with which the robe was shot remained, a futile concealment for the slim white of her shoulders, the soft curves of rounded breasts. But Garry's eyes were held by the eyes that looked and locked with his.

Dark eyes, deep and steady, yet glowing softly with the wonder of this awakening. Windows, crystal clear, through which shone softly a light that filled him through and through!

Alluring as was the rounded whiteness of the form so thinly veiled, it was not this nor the childlike beauty of the face that held him spellbound. Garry Connell's only love had been the desert, and now he was filled and shaken by the glamour from within these thrilling eyes.

A rasping word made echoes in the silence, and Garry saw the girl's eyes widen as she turned them upon the black one, who had spoken. He saw her face lose its color and go dead white, and plainly her wide eyes showed the fears that swept in upon her with returning remembrance.

GARRY followed her gaze to the wild figure whose slitted eyes glittered in savage triumph and pos-

sessiveness at the white beauty of the trembling girl. The lean figure spoke again in that rasping, unintelligible voice—he addressed the girl, now—and the tone sent a strange prickling of animosity through every fibre of the watching man.

The black one took one stride forward; the girl, in a flash of white and gold, sprang from her resting place to take shelter behind the high casket. Her eyes came back to Garry's, and the call for help though voiceless was none the less real.

Then her pale lips moved, and she called to him with a clear voice that uttered unknown words.

Garry came from the spell that bound him, and with a quick rush made between her and the advancing man. He landed tense and crouching, and his voice was hoarse with excitement when he spoke.

"That'll be all from you," he told the black one.

His words could mean nothing to this savage, but the tone that rang through them, and his crouching, ready pose, must have been plain. The inky face beneath the high-pointed dome of head was twisted with rage; the eyes glared at this being who dared to oppose him. But the black one paused, then stepped backward to the casket where he had been.

Garry retreated a few slow steps to the end of the metal box that sheltered the girl. "Can't you understand me?" he asked. "Am I dreaming? What has happened? Who are you, and who is this black beast? What does it all mean?"

Again he was sure that mere speech useless, but he felt that he had to speak, to say something, anything, to prove the reality of his own waking self and of the wild, nightmare experience.

He saw the crouching girl rise to her full height; he saw the movement of her hand as she swept the dark hair away from her face, and the film of gold lace clung closely about her as

she came to his side. One hand was outstretched to rest, light and cool, upon his forehead.

HE heard her voice, so soft and liquid yet so charged with terror. She spoke meaningless words and phrases, but at the touch of her hand upon his face he started abruptly.

Did the words themselves take on meaning and coherence, or was it something within himself?—Garry could not have told. But, with the startling clarity of a radio switched full on, he got the impress of her thoughts, and his own brain took them and put them into words that he knew.

"You will help me, you will save me," the words were saying. "You are one of us, I know. You are a stranger, but your skin is white; you are not of the tribe of Horab."

Garry was motionless and listening. He knew he was sensing her thoughts—she was communicating with him by some telepathic magic—and he knew, as he caught the words, that Horab was the black one there before him, reaching and feeling within the casket where he had slept. Horab—a savage king of a savage land—

"He captured me," the words continued in breathless haste. "I am from Zahn: do you know the good land of Zahn? I am Luhra. Horab captured me; carried me here to this island; it was yesterday he brought me here. He put me to sleep, and he put his men to sleep, hundreds of his chosen warriors. He worked his magic, and he said we would sleep for one hundred summers. But it was yesterday. And now you will save me; my father is a great man; he will reward you—"

The sentences flashed almost incoherently into his mind, but ceased at a sound and stirring from the room at their backs.

Garry needed a moment for the substance of the message to register. He had heard it as truly as if she had spoken: Horab had captured her—yesterday!... And his own lips that had

been loose with astonishment closed to a grim smile.

"Yesterday!" She thought it was yesterday that her long night had begun. Did Horab know the truth? Garry was suddenly certain that he did. Horab's plans had miscarried; he could not know how far in a distant past was that day when he had placed himself and this girl in their caskets, safe in their mountain tomb.

ONLY an instant for these thoughts to form—then his eyes were steady upon the tall savage who had found what he sought in the big metal case. Horab, king of a vanished race, turned now with a heavy scepter in his hand; and its jeweled head flashed brilliantly as he raised it high in air and shouted an echoing command into the room. A white hand was tugging at Garry's shoulder, a soft body clinging close, to turn him where new danger threatened.

The other caskets! He had forgotten them, and he saw the nearer ones alive with struggling forms. A black man-shape, with sullen, animal face and pointed head, came slowly erect and staggered upon the floor. Another—and another! There were scores of the black, naked men who scrambled from the nearer caskets and swayed drunkenly upon their feet.

Garry stood tense, his mind a chaos of half-formed plans. This one brute he might handle, but the whole tribe—that was too large an order. Yet he knew with an unshakable conviction that he would carry this girl from their evil clutches or die in the trying.

Feminine charms had failed to interest Garry in that world outside, but now the message of these soft eyes, the appealing beauty of this lovely face, proud and unafraid despite her fears, the hand so soft and trusting upon his face!—there had something entered into Garry Connell's lonely life that struck deep within him and found a ready response.

He swept one arm about the soft,

yielding body beneath its wisp of garment, and he swung her behind him as he set himself to meet the attack. And he flashed her a look that must have carried a message, for the trembling lips were framing a ghost of a smile as her eyes met his.

Garry's thoughts darted to the gun, but his tightly-wrapped pack was in the passage outside. He prayed for a moment's time that he might meet this mob pistol in hand, and he half turned; but no time was given. The leader was shouting orders, his harsh voice resounded in shattering echoes throughout the stone vault, and the horde of blacks surged forward at his command.

A MASS of lean bodies, with faces ugly and brutal where sleep-filled eyes opened wide and glaring! They crowded upon him, and Garry met the rush with a rain of straight rights and lefts into the nearest faces. He was carried backward to the wall by the weight of their numbers, but he saw some go down for the count.

The room seemed filled with leaping, shouting men. Their shrill cries echoed in a tumult of discord, and above all Garry heard the hoarse screams of their leader.

There were fists and arms clubbing at his head. He warded them off, then sprang from the wall, leaping outward and sideways, where there was room for free swings of his pounding fists. Another black face went blank under the impact of his blow—a second—and a third!

He was giving ground slowly as the others came on. Then beyond the crowding figures he saw one who held a trident spear high in air. The weapon was poised; the metal points shone in the green light—points that would tear his body to shreds at a single blow.

Garry paused but an instant, then opened his clenched fists to clutch the lean neck of an enemy before him. He whirled the man's body and held it as a shield while he reached vainly to grip at the thrusting spear. Dimly he

saw the flash of white and gold where the girl, Luhra, threw her own body upon the armed figure and clung in desperation to the shaft of the deadly weapon.

GARRY hung fast to the struggling body that was his shield; there were other spears now that flashed in the air. He loosed one hand and landed a short jab in the face of a savage whose hands were at his throat. The blow was light, and he was amazed to see the man stagger and fall. There were others who swayed helplessly and stumbled to their knees. Spears rang sharply, clattering upon the stone. . . . They were falling. The body he held went suddenly limp within his arms and sagged heavily to the floor. . . .

Garry saw the one who had threatened him drop; he took the girl with him as he fell, and his spear flew wildly from his open hand. Garry was alone! —and the enemy was only a tangle of sprawling bodies where the twitching of an outflung arm marked the last sign of life.

He was breathing hard, for some of the enemies' blows had landed, and he staggered as he wiped a trickle of blood from his eyes. No time to figure what this meant, but the blacks were certainly out of it. Beyond the huddled bodies the tall figure of Horab leaped wildly in air as he sprang forward, and in the same instant Garry threw himself between the black menace and the prostrate girl.

He staggered again as he landed from his wild leap, and he called for his last reserve of strength to put power behind the blow that he launched for the snarling face above.

The heavy scepter swung high, and was falling as Garry struck. He saw the blow start; saw the fiery arc the jeweled head made in descending like a mace above his head. Then the face of Horab vanished, and the room was a whirling place of flashing red and yellow before blackness blotted it out. . . .

GARRY awoke to blink stupidly at a green light above him. His head was a blinding, throbbing pain that blurred his thoughts.

It cleared slowly. The gleaming figure of a girl was rising from the floor. His aching eyes saw the white of her young body through the dull glow of golden lace. Her eyes came to his, and sharply he realized that this was no dream—this cave whose walls seemed swaying, the face that was staring pitifully at him, and, beyond, in a ghastly green light, the dark silhouette of a lean man who bent his pointed head above a chest.

Connell's mind was a whirl of snarled thoughts and emotions, of puzzled wonder and fighting rage; yet strangely through and above them all was a feeling of pure joy in the message of the eyes in a face that was utterly lovely.

The black figure had opened the chest. Garry saw the luminous green about it shot through with the reflected radiance of many gems. Jewels cascaded brilliantly from the lean black hands as they withdrew a golden cord. Part of some gem-incrusted fabric, it was, that he tore roughly from its rotted fastenings before coming swiftly to the still helpless body of Connell.

Garry's struggles were futile; his hands were tied before him. The shooting pain of a prodding spear brought him from the paralyzing numbness that held him, and he came dizzily to his feet. Again the walls whirled, and he would have fallen headlong but for a lithe, soft body that sprang close to throw white arms about him.

Through blood-shot eyes he saw Luhra, of the land of Zahn, with head held high and flashing eyes as she turned squarely to face the savage black. And he heard the stream of strange sentences that she poured protestingly upon him.

HER message broke off abruptly. Garry's eyes followed hers to watch a savage king, naked but for the

tattered remnants of robes that time had eaten. He was reaching into a casket that had once held kingly raiment—reaching with a lean black hand that brought forth only fragments of purple and crimson cloth that went quickly to dust within his hands.

Garry saw the slitted eyes stare in puzzled wonder at the rotted cloth, then glance sharply and inquiringly about. He saw the black one place a jeweled head-dress of barbaric splendor upon his ugly, pointed head, then rise and cross slowly to the heap of bodies. Spear in hand, he passed on to the serried rows of caskets.

Those nearest were empty, as Garry knew; he had seen the eruption of life from within them. Horab, with a growled word, moved on to the other caskets that stretched out across the room. The ugly head stooped; again the hands reached down, to come back this time with an empty, gleaming skull.

Garry thought once of his pistol, but knew in the same thought that he could never reach it; the spear of Horab would crash through him at the first movement. He dismissed the thought—for got it—and forgot all else in the fascination of beholding the sagging lips and the scowling stupefaction on the black face of Horab. And slowly there came to his throbbing brain an explanation.

One hundred summers, Luhra had said—Horab had meant to sleep for a hundred years—and the machine that was to waken him had failed to function. Ages beyond computing had passed, and these two only, the black king and the girl, had survived. They had been directly beneath the light; its flooding energy had brought them safely through the dreamless years. But, for the others, it had been different.

Those nearest the light had responded to the vibrating call, but their vitality was gone; their moment of life was short. As for the hundreds who had felt the light but faintly—the

skull told the story. They had died as they slept, died thousands of years ago, and their skeletons were all that remained to mock at their king and the frustration of his plans.

BUT what was the purpose of the long sleep? Luhra's touch and her soundless words supplied the answer.

"Why did he wish this?" her mind said, repeating his question. "Horab's own country was lost; the yellow ones from across the great water had conquered and overrun it. But Horab had planted the seeds of disease, and the yellow ones must all die in time. Horab is a king and a worker of magic; he is in league with a devil; he learns his magic of him. We, of Zahn, all feared the magic of Horab—" She stopped at the quiver of rock beneath their feet.

Garry's mind had cleared, but it was an instant before he knew that the movement was not in his own throbbing head. Then the earth tremor came unmistakably, and his thoughts flashed back to the mass of rock above the mouth of the cave. If more quakes were coming they must get out, and do it at once—

The black hand of King Horab cast the skull vindictively against the wall, and the clatter of its falling fragments mingled with strange oaths from the savage lips. Then he came toward the two and Garry searched his mind desperately for some means of escape.

The trident spear was aimed, and Garry waited for the throw. He felt, more than saw, the flash of light that was Luhra as she sprang for a spear beside the fallen men. An instant and she was before him, tense and poised, a golden Amazon, whose upraised arm and steady eyes checked even Horab in his advance.

She spoke to the savage in sharp, staccato phrases, but Garry got no meaning from the words. There was a quick interchange between them; vehement protest and shaking of his

V
5
3
M
A
R
3
1
XUM

poised spear on the part of Horab. Luhra added a word or two, and she lowered her weapon as Horab did the same.

Her head was bowed as she reached to touch Garry's forehead. He sensed a hopeless sorrow that was so plainly hers, but with it he felt a mingling of another emotion that stirred him to the depths of his being. The slim, white figure straightened, and the dark eyes squarely upon his when she spoke.

"Listen carefully," she said; "it is the last time—"

GARRY found himself trembling; he was suddenly breathless with emotion. The racking pain in his head had settled to a dull ache, but his brain was clear, and through it were flashing strange thoughts.

The threat, the wild adventure itself! —they were nothing before the truth that was so plain to him now. He loved this girl! he loved her! —and his whole self responded with an inflow of fresh energy at the thought. A stranger from a strange, lost world! —but what of it? —he loved her! . . . The message from the lips and fingers of the girl broke in upon the thoughts that were crying for expression.

"You think of me." She smiled with her lips and eyes. "I am glad that you do, my dear one, but it is hopeless.

"Listen: I have promised; Luhra has spoken: I will go with Horab to do as he wills. I will go freely, and he will leave you here unharmed. He promises me this.

"I will go with Horab far across the blue water that surrounds us here. It is an island, as you know, for have you not come here from afar?" Garry broke in with a startled exclamation. An island! Water! He closed his lips upon the denial of her words.

"And you," Luhra continued unheeding, "when we have gone, will return to your own land.

"But, oh, my dear one, remember always I love you. I have read your thoughts, oh bravest and tenderest of

men; I loved you from the moment when my eyes opened and found you waiting there. I am telling you now, for I will never see you again." She broke in upon the wild urge of protest that filled his mind.

With an imperious gesture she motioned Horab to discard his spear, and she placed hers beside it on the rocky floor. But she flinched and retreated from the outstretched arms and grasping hands, while Garry Connell struggled in insane frenzy at the cords that bound his wrists.

He felt the lean hands of Horab upon him, and the long arms held him in a crushing grip. And he saw the black face laugh evilly at the watching girl as Horab kicked the spears over beside the casket where she had been.

Garry felt himself raised in air, and he was as helpless as a child in that grasp. An instant later he was thrown heavily, to lie bruised and breathless in the metal box where first he had seen Luhra's face in wide-eyed awakening.

THE rasping voice of Horab rose high and shrill. He was shouting triumphantly at the girl, while his hands worked to bind Garry's feet. Luhra's head and shoulders showed above the casket edge as she circled swiftly to approach from the opposite side and reach a trembling hand that would make the contact necessary for thought transference. Her cool touch was upon him; Garry ceased his futile struggles while her words came brokenly to his mind.

"Horab has tricked us," she cried; "he is leaving you here. He will paralyze you with the devil song of the bell, but not to sleep as I did: it will stop on another note. He says you will be always awake, but helpless—thinking—thinking—always!"

She buried her face in her hands to hide from his gaze the horror that was in her eyes. Garry Connell's straining hands went limp. The terror in the girl's voice struck through his own

wild medley of thoughts to make him shudder with realization of the truth.

The threat was real! If Horab left the cave and took Luhra with him, the two would die in the desert. The black savage would never dare to face the strange, new world. And he, Garry, would be here in this cave, in this very coffin, held in a waking death. No one knew he was here; only by chance would the cave be investigated. And when someone finally came!

Garry stared in fascination at the green light. He knew with terrible certainty that whatever help might come would come too late. To lie there hour after hour, for days and then for years—waiting!—always waiting! . . . And he could never still his thoughts. . . . He had a sickening realization of the thing they would find. A body!—his body!—and the mind within it utterly insane. . . .

The sound of the shrieking bell was in his ears, and his nerves were trembling in response. He saw long arms above the casket, tearing away the figure of a struggling girl. . . . And then he knew he was alone. . . .

THE sound of the bell rose to the piercing, nerve-shredding scream he had heard before. He must think fast—and act!—but the numbness of brain and muscle was creeping upon him. He tried to call out, but his throat was tight, and would not respond. The echoes died into silence; the vibrations, as before, passed beyond audible range. He was sinking . . . sinking. . . .

Dimly he felt the casket shaking beneath him. In some distant corner of his mind he knew that the earthquake shocks had returned. Then he heard with ear-splitting plainness the shrieking discord as the tremor shook the vibrating machine to silence.

The room was quiet; the paralysis left him; and in the instant of his release the clear brain of Garry Connell flashed from chaos to lay before him a full-formed plan.

"Luhra!" he called in the silent

room. "Luhra!" But it seemed an age before he heard Horab and his captive returning from the passage. Then the touch of her hand gave him courage to continue.

"Yes?" she whispered; "yes, my dear one?"

He saw the shoulders of the black as he half-raised a spear threateningly toward the girl, then turned to adjust the whirring machine.

"Tell him," shouted Garry, "—tell Horab to shut off that damnable machine!" The shriek of it was rising again to drown his voice. "Tell him his life depends upon it. Tell him to listen to what I say or he will die."

He heard the girl's voice raised in a high-pitched call, and he heard the rasping snarl of Horab in reply. The girl repeated her cry above the echoing clamor of the bell—and the intolerable, rising scream, after a time, was stilled.

Garry experienced one raging moment when he would have given his hope of life for the ability to talk to Horab face to face and in words that could penetrate the black one's brain. But he could not. He must use this girl as an interpreter, and he must give her words to say that would make this ugly beast pause. He must speak as she would speak; put words and sentences into her mouth that would reach the savage superstitions of the other.

He spoke slowly, and stared impressively into the dark, fear-filled eyes in the white face that bent above him. He must make the girl believe.

"Horab works magic," he told her. "Tell Horab that I, too, am a magician—a great magician—a greater one than Horab."

HE waited an instant to hear the girl's words and the disdainful laughter from lips in a savage face thrust close to where he lay.

"Horab is truly a magician," said Luhra doubtfully; "he laughs at your magic. Horab's *Tao* is a strong *Tao*, wicked and powerful."

"His *Tao*?" said Garry, and looked at the girl questioningly. He got the thought in her mind. "Oh, yes—his god, or devil."

He turned his head to stare straight into the grinning face whose wide, thin lips were twisted into a leering snarl. Garry had to summon all his power of will to hold the look that he gave his enemy and to laugh, in his turn, long and contemptuously. Another tremor shook the casket where he lay.

"Tell Horab," he ordered, while his eyes stared steadily into those of the savage king, "—tell Horab my *Tao* is stronger than his. My *Tao* is angry because I have been harmed; he is shaking the mountain. He will shake it down on Horab and crush out his life."

He continued to stare while he heard Luhra's voice, high with hope, and he saw a change of expression flicker across the black face, though Horab shouted a vehement reply.

Luhra was speaking to him. "Horab says the earth has shaken before; that it is not your *Tao* who shakes it. He asks for another sign."

Garry was not surprised. He had fired this shot at random; the tremor itself had suggested it. And now—

"Another sign!" Garry had to fight hard for self-control to keep from shouting the truth to this evil thing—to keep from telling him of the time that had passed, and of the world that was waiting for him. But that would never do: he must play upon this black one's superstitions. Let Horab once leave this cave with that devilish, soundless scream ringing in his ears and he, Garry Connell, was lost. And Luhra!—what hope for her out there? . . . The black hands were moving impatiently toward the machine. . . .

Garry found himself speaking slowly—short sentences that Luhra quickly repeated. And something within him rose to frame words such as Garry Connell, man of the desert, would never have thought to speak—phrases that

best might reach a savage, vicious mind.

HE glanced once at the watch on his wrist. He did not feel the torture of the tight gold cord. He was thinking in terms of daylight, and of how much time had passed since he had seen the sun. . . .

"Horab shall have a sign—a terrible sign," he said. "Death waits for Horab in the world outside, my *Tao* tells me. Horab shall die horribly. I see him choking in the hot sand. His tongue fills his mouth. The hot sun burns, and he is filled with fire. He tries to scream—to call upon his *Tao*—but he makes no sound. . . . And so shall Horab die."

The girl translated swiftly; the answer was a wild cry of rage from the black. He sprang beside the helpless man and his spear was raised high.

Garry felt the weight of Luhra's body thrown protectingly across him, and looked up to see murder in the savage, slitted eyes. "Tell Horab," he directed sharply, "that if he harms you or me the burning death is his! But—" He waited deliberately after Luhra had spoken, and he saw plainly the flicker of fear in the ugly face. Now was the time.

"Unbind my feet!" he ordered, and he put into his voice all the force and menace he could muster. "Take me to the outer world. Take your spear. If I do not speak truth, kill me there. My *Tao* will show you a sign; he will fill your heart with fear as it now is filled with evil. But, it may be I can save you. Unbind my feet! Be quick!"

Again he waited while Luhra spoke, and he cursed silently with the agony of waiting. To be playing a part, speaking these absurdly childish things, when what he wanted was his hand upon a gun or in a grip of death about that black throat! Yet he lay as still as if the vibrations of the bell were upon him, and his eyes held unwaveringly upon the savage face, until he felt the fumbling of hands about his feet. . . .

ASQUARE-CUT portal!—and beyond it a golden sun that shone through mists of purple and rose! Was he too late? Garry pressed forward in what would have been a clumsy run, but for the spear that had prodded him through all the long passage, and that warned now against attempted escape.

The brilliance and heat that struck him when he stepped out into the open brought Garry in a flash from the world of horror and make-believe into the world he knew. He wanted to shout for sheer joy; but more than all else he wanted to leap at the ugly thing who stood blinking his eyes in the mouth of the cave.

The thought of escape was strong upon him, but the touch of a timid hand showed the folly of that. Luhra was beside him, her filmy lacework shining softly in the sun, to make more lovely the delicate flush beneath. Her eyes, shielded from the sun, were upon him with a look half hopeful, half despairing. No, he must see it through—go on with his play-acting—meet magic with magic. Horab had come out from the cave, and spear in hand he stood commandingly above them on a huge boulder. Yes, the magic must go on.

The harsh voice of the savage ripped out unintelligible words. Luhra translated. "It is changed," she said, "and Horab fears. But the water is there, and there is no burning death.... He says your Tao is weak."

Garry stared with thankful eyes across the blue expanse where a line of white marked ghostly breakers on a distant shore; where hills were reflected in the shimmering blue. But the sun was still above their tops, so he must spar for time—

"My Tao is strong," he said, and went on with whatever fantastic thoughts came into his mind. He was talking against time. He told of the new world his Tao had built, of men harnessing the lightning and flying through the air; of cannon that roared like the thunder and threw death and destruction upon those that the Tao

would destroy. . . . And his eyes watched the slow descent of the dropping sun, while the figure above stirred impatiently and raised his spear.

"A sign!" Luhra was imploring. "He does not believe!"

The golden ball was touching now on a distant, purple peak. The amazing magic of the desert!—its moment had come! Garry indicated as best he could the phantom sea, so real, below.

"My Tao has spoken," he shouted: "watch! The waters shall be dried up; the seas shall become a desert of hot sand; the lands and waters that Horab knows shall be no more! There shall be no food for his stomach nor water for his lips where Horab wanders in torment.... Unless I save him."

HE turned to stare at the vast mirage. He knew that the eyes of the others had followed his, and he knew that they saw the first change that crept over the land.

The blue that was so unmistakably a sea was dissolving; it seemed sucked into the sand. And, while yet the hot rays cast their lingering gold over mountain and plain, the seas faded and were gone . . . and where they had been in unquestioned reality was only yellow sand that whirled hotly and drifted in the first breath of the coming night....

The towering figure above them stood rigid. Garry had found a sharp edge of rock, and sawed frantically upon it to cut the soft gold of the cords at his wrists. The one above them paid no heed; his eyes were held in horror of this silent death that swept across the world.

The hand that Garry extended was steady and cautious; his arm crept about the body of white and gold to draw the amazed and wondering girl silently into the open cave.

"Follow!" he ordered, and dashed headlong down the darkened way where an automatic was waiting for his eager fingers.

The pack was there, and he tore at

it with frenzied hands to grip at the pistol within. And there was also an open chest whose contents glittered in the green light, and whose weight was not too great for him to carry....

He had both chest and gun when he returned. The stumbling falls in his mad rush had not served to allay the hurts of his tortured body, nor still his raging fury. He called to Luhra as he ran—and realized that Luhra was gone. The chest fell forgotten at his feet as he rushed out; he shouted her name and cursed himself for leaving her.

HAD the fascination of the outer world drawn her back? Had she trusted too greatly in the power of his *Tao* to shield her from harm? Connell could not know. He knew only that he saw her struggling in the grip of the long arms where the black one held her on an outthrust rock.

They were a hundred feet away, yet the black face beneath its pointed skull showed plainly its bestial fury as Garry sprang forward. With one motion the tall figure dashed the girl to the stone at his feet and raised his spear. He paused to laugh harshly at the man who rushed toward him—who could never reach him to stop the fatal thrust.

A threat, it might have been, to hold the attacker off, or a murderous intent to end now and forever this one captive's life: Garry did not wait to learn. And the hundred-foot distance that meant a hundred feet of safety to the savage was spanned by a stream of lead from a gun whose stabbing flashes cracked sharply upon the still air. The ringing clatter of a spear that fell among granite stones came thinly to Garry as he saw the black form of Horab, king of another day, spin dizzily from the rock on which he stood.

He had hit him—wounded him at least—and the firing of that wild fusillade might have emptied the magazine! Garry waited for nothing more, but gathered the limp body of the girl within his outstretched arms and car-

ried her stumblingly across the welter of rocks on the boulder-strewn slope. Nor did he stop until he had gained the safety of open ground beyond the marks of the great slide.

THE earth was shivering and weaving as he laid her down; a rock crashed sharply in the distance. Garry turned to retrace his steps and leap wildly from rock to rock toward the mouth of the cave in a granite cliff. And the metal chest was in his arms when he returned where Luhra waited.

The ground was alive with sickening motion, he was nauseated with earthquake sickness, but he gave thought only to his gun and the one cartridge that he found in the chamber. He steadied his arm upon a rock to take aim at a figure on a distant slope.

Horab had climbed back upon the rock. A lean figure and black, he was sharply outlined in the last rays of the setting sun; the target was clear beyond the pistol's sights. But the fingers of the grim-faced man refused to tighten upon the trigger.

Savage and cruel—a relic of a bygone age! He stood there, ludicrous and unreal in his stark black nakedness, his frayed robes of crimson whipping to tatters in the breeze. Yet he had forgotten his wounds—Horab was standing upright—and Garry's hand that held the pistol fell loosely at his side. The hate melted from his heart as he watched where Horab drew himself painfully erect.

A barbarous figure was Horab, and evil beyond redemption, yet there were not lacking the attributes of a king in the grotesque form whose head was still held high. The sun made flashing brilliance of the jewels on that distorted head, while he stared with hopeless, savage eyes across the changed world where he could have no part. His *Tao* had failed him; his enemy had struck him down; and now—

The rock that had been a rest for Garry's arm was swaying, and to his

ears came a rumble and groan. Sentinel Mountain, that had watched the ages pass, that had seen the oceans truly change to sand, protested again at this disturbance of its own long sleep.

Garry heard the coming of the masses from above; the crashing din was deadening to his ears. They were safe—and his eyes were upon a savage figure, black and tall, that stared and stared, silently, across a sea of yellow sand. He watched it, clear-cut, motionless—until it vanished beneath the roaring flood of rocks.

AND close in his arms there pressed the soft body of a trembling girl who touched his face and whispered: "Your *Tao*, my brave one, is strong. Hold me closely that he may count me as your friend."

His own whispered words, though differing somewhat, were a fervent echo of hers. He saw the rocky masses

piled high where the mouth of a cave had been; and "Thank God!" Garry Connell said, "we got out of there in time!"

The casket of jewels lay neglected among the rocks: to-morrow would be time enough to salvage the wealth for which he had risked his life. He swept the girl into his arms, and the sun's last rays made golden splendor of his burden as he carried her across the broken stones.

His ranch showed far below him when he stopped, but the green of date palms had vanished under the last great sweep of rocks. Some few that remained made dark splotches among the shadows that were engulfing the world.

What did it matter? Miramar—"Beautiful Sea!" He laughed grimly at thought of how that sea had served him, but his eyes were tender in his tanned and blood-stained face.

Miramar could be restored. And it would be less lonely now....

A ROBOT CHEMIST

A ROBOT chemist with an electric eye, radio brain and magnet hands functioned without human supervision in an improvised laboratory recently before members of the New York Electrical Society.

The automatic chemist performed several experiments. Its work was explained by William C. MacTavish, professor of chemistry at New York University, and was part of a program in which cold light was reproduced, a sample weighing a millionth of a gram analyzed, a photo-electric cell used to control analysis and new scientific apparatus demonstrated.

In his talk on "The Magic of Modern Chemistry," Professor MacTavish demonstrated the separation of para-hydrogen and ortho-hydrogen. In the micro-analysis of a millionth of a gram, Professor MacTavish exhibited in the micro-projector a ball of gold weighing one thousandth of a milligram (one twenty-eight millionth of an ounce), having a value of less than one ten-thousandth of a cent.

The robot chemist was the joint creation of Dr. H. M. Partridge and Professor Ralph H. Muller of the department of chemistry at New York University. In explaining what the automatic chemist can do, Professor MacTavish said:

"The ability of the automatic chemist to control chemical operations is due to its sensitivity to slight variations in color and light intensity. Its working parts are very simple.

They consist of a standard light source, in this case an electric light, a photo-electric cell which detects differences in the amount of light impinging on it, a radio tube which amplifies the signal received from the photo-electric cell and which operates the relays controlling the automatic valves.

"Between the electric light and the photo-electric cell is placed a glass vessel holding an alkali that is to be neutralized. Above is a tube from which an acid passes, drop by drop, through an automatic valve, into the alkali. A small amount of chemical indicator added to the alkali maintains a red color in it until it is neutralized. When a sufficient amount of the acid has dropped into the alkali, the red color disappears, indicating complete neutralization.

"When the solution is colored red, an insufficient amount of light gets through to the photo-electric cell. As the red color gradually diminishes, the amount of light passing through increases, and when the solution is entirely clear the light reaches a critical value which causes the photo-electric cell to pass a signal to the radio tube. This tube operates the relay which closes a valve and shuts off the supply of acid.

"Using a device of this sort to perform such operations around a laboratory will save a great deal of a chemist's time. Its electric eye is about 165 times as sensitive to differences in color as any human eye."

V
5
3
M
A
R
3
1
XUM



Beyond the Vanishing Point

A COMPLETE NOVELETTE

By Ray Cummings

CHAPTER I

The Fragment of Quartz

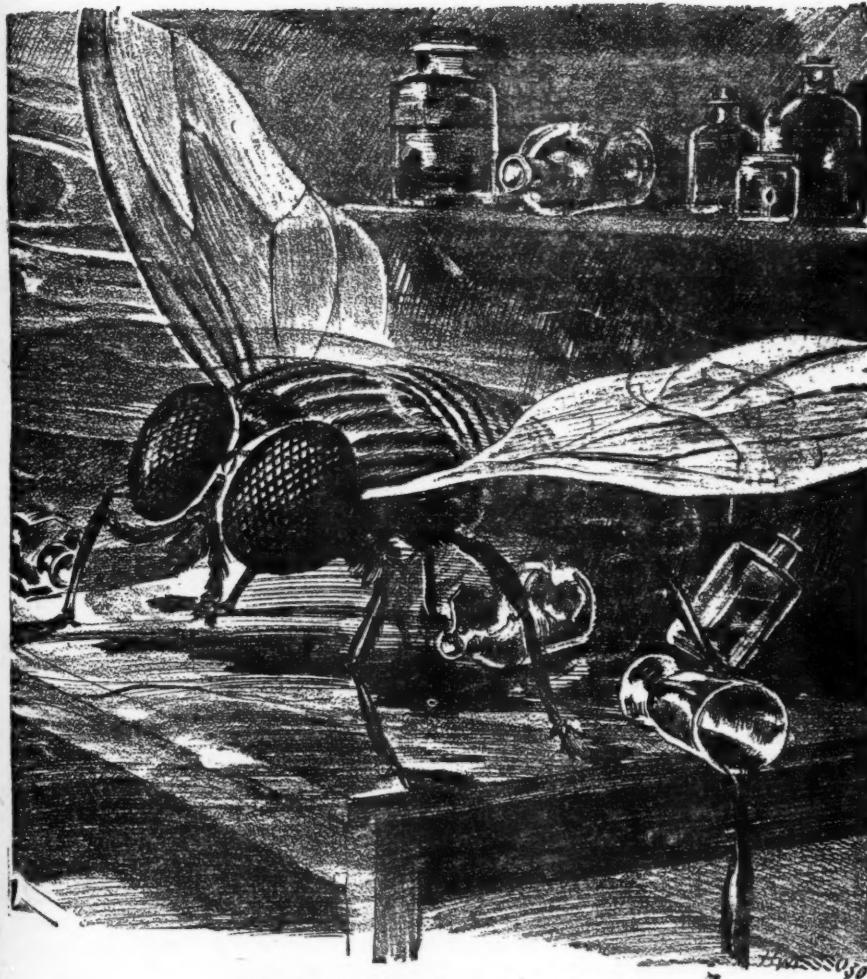
IT was shortly after noon of December 31, 1960, when the series of weird and startling events began which took me into the tiny world of an atom of gold, beyond the vanishing point, beyond the range of even the highest-powered electric-mic-

roscope. My name is George Randolph. I was, that momentous afternoon, assistant chemist for the Ajax International Dye Company, with main offices in New York City.

It was twelve-twenty when the local exchange call-sorter announced Alan's connection from Quebec.

"You, George? Look here, we've got to have you up here at once.

The tale of a golden atom—an astounding adventure in size.



The fly landed with a thud on the center table.

Chateau Frontenac, Quebec. Will you come?"

I could see his face imaged in the little mirror on my desk; the anxiety, tenseness in his voice, was duplicated in his expression.

"Well—" I began.

"You must, George. Babs and I need you. See here—"

He tried at first to make it sound like an invitation for a New Year's Eve holiday. But I knew it was not that. Alan and Barbara Kent were my best friends. They were twins, eighteen years old. I felt that Alan would always be my best

friend; but for Babs my hopes, longings, went far deeper, though as yet I had never brought myself to the point of telling her so.

"I'd like to come, Alan. But—"

"You must! George, I can't tell you over the public air. It's—I've seen *him*! He's diabolical! I know it now!"

His! It could only mean, of all the world, one person!

"He's here!" he went on. "Near here. We've seen him to-day! I didn't want to tell you, but that's why we came. It seemed a long chance, but it's he, I'm positive!"

I was staring at the image of Alan's eyes; it seemed that there was horror in them. And in his voice. "God, George, it's weird! Weird, I tell you. His looks—he—oh I can't tell you now! Only, come!"

I WAS busy at the office in spite of the holiday season, but I dropped everything and went. By one o'clock that afternoon I was wheeling my little sport midge from its cage on the roof of the Metropole building, and went into the air.

It was a cold gray afternoon with the feel of coming snow. I made a good two hundred and fifty miles at first, taking the northbound through-traffic lane which to-day the meteorological conditions had placed at 6,200 feet altitude.

Flying is largely automatic. There was not enough traffic to bother me. The details of leaving the office so hastily had been too engrossing for thought of Alan and Babs. But now, in my little pit at the controls, my mind flung ahead. They had located him. That meant Franz Polter, for whom we had been searching nearly four years. And my memory went back into the past with vivid vision. . . .

The Kents, four years ago, were living on Long Island. Alan and Babs were fourteen years old, and I was seventeen. Even then Babs represented to me all that was desirable in girlhood. I lived in a neighboring house that summer and saw them every day.

To my adolescent mind a thrilling mystery hung upon the Kent family. The mother was dead. Dr. Kent, father of Alan and Babs, maintained a luxurious home, with only a housekeeper and no other servant. Dr. Kent was a retired chemist. He had, in his home, a chemical laboratory in which he was working upon some mysterious problem. His children did not know what it was, nor, of course, did I. And none of us had ever been in the laboratory, except that when occasion offered we stole surreptitious peeps.

I recall Dr. Kent as a kindly, iron-gray haired gentleman. He was stern with the discipline of his children; but he loved them, and was indulgent in a thousand ways. They loved him; and I, an orphan, began looking upon him almost as a father. I was interested in chemistry. He knew it, and did his best to help and encourage me in my studies.

THERE came an afternoon in the summer of 1956, when arriving at the Kent home, I ran upon a startling scene. The only other member of the household was a young fellow of twenty-five, named Franz Polter. He was a foreigner, born, I understood, in one of the Balkan Protectorates; and he was here, employed by Dr. Kent as laboratory assistant. He had been with the Kents, at this time, two years. Alan and Babs did not like him, nor did I. He must have been a clever, skilful chemist. No doubt he was. But in aspect he was, to us, repulsive. A hunchback, with a short thick body; dangling arms that suggested a gorilla; barrel chest; a lump set askew on his left shoulder, and his massive head planted down with almost no neck. His face was rugged in feature; a wide mouth, a high-bridged heavy nose; and above the face a great shock of wavy black hair. It was an intelligent face; in itself, not repulsive.

But I think we all three feared Franz Polter. There was always something sinister about him, quite apart from his deformity.

I came, that afternoon, upon Babs and Polter under a tree on the Kent lawn. Babs, at fourteen with her long black braids down her back, bare-legged and short-skirted in a summer sport costume, was standing against the tree with Polter facing her. They were about of a height. To my youthful imaginative mind rose the fleeting picture of a young girl in a forest menaced by a gorilla.

I came upon them suddenly. I heard Polter say:

"But I lof you. And you are almos' a woman. Some day you lof me."

He put out his thick hand and gripped her shoulder. She tried to twist away. She was frightened, but she laughed.

"You—you're crazy!"

He was suddenly holding her in his arms, and she was fighting him. I dashed forward. Babs was always a spunky sort of girl. In spite of her fear now, she kept on laughing, and she shouted:

"You—let me go, you—hunchback!"

He did let her go; but in a frenzy of rage he hauled back his hand and struck her in the face. I was upon him the next second. I had him down on the lawn, punching him; but though at seventeen I was a reasonably husky lad, the hunchback with his thick, hairy gorilla arms proved much stronger. He heaved me off. And then the commotion brought Alan. Without waiting to find out what the trouble was, he jumped on Polter. Between us, I think we would have beaten him pretty badly. But the housekeeper summoned Dr. Kent and the fight was over.

POLTER left for good within an hour. He did not speak to any of us. But I saw him as he put his luggage into the taxi which Dr. Kent had summoned. I was standing silently nearby with Babs and Alan. The look he flung us as he drove away carried an unmistakable menace—the promise of vengeance. And I think now that in his warped and twisted mind he was telling himself that he would some day make Babs regret that she had laughed at his love.

What happened that night none of us ever knew. Dr. Kent worked late in his laboratory; he was there when Alan and Babs and the housekeeper went to bed. He had written a note to Alan; it was found on his desk in a corner of the laboratory next morning, addressed in care of the family lawyer to be given Alan in the event his father died. It said very little. Described a

tiny fragment of gold quartz rock the size of a walnut which would be found under the giant microscope in the laboratory; and told Alan to give it to the American Scientific Society to be guarded and watched very carefully.

This note was found, but Dr. Kent had vanished! There had been a midnight marauder. The laboratory was on the lower floor of the house. Through one of its open windows, so the police said, an intruder had entered. There was evidence of a struggle, but it must have been short, and neither Babs, Alan, the housekeeper nor any of the neighbors heard anything amiss. And the fragment of golden quartz was gone!

The police investigation came to nothing. Polter was found in New York. He withstood the police questions. There was nothing except suspicion upon which he could be held, and he was finally released. Immediately, he disappeared.

Neither Alan, Babs nor I saw Polter again. Dr. Kent had never been heard from to this day, four years later when I flew to join the twins in Quebec. And now Alan had told me that Polter was up there! We had never ceased to believe that Dr. Kent was alive, and that Polter was the midnight marauder. And as we grew older, we began to search for Polter. It seemed to us that now we were older, if we could once get our hands on him, we could drag from him the truth in which the police had failed.

THE call of a traffic director in mid-Vermont brought me back from these vivid thoughts. My buzzer was clanging; a peremptory halting-signal day-beam came darting up at me from below. It caught me and clung. I shouted down at it.

"What's the matter?" I gave my name and number and all the details in a breath. Above everything I had no wish to be halted now. "What's the matter? I haven't done anything wrong."

"The hell you haven't," the director roared. "Come down to three thousand. That lane's barred."

I dove obediently and his beam followed me. "Once more like that, young fellow—" But he went busy with somebody else and I didn't hear the end of his threat.

I crossed into Maine in mid-afternoon. Twilight was upon me. The sky was solid lead. The landscape all up through here was gray-white with snow in the gathering darkness. I passed the city of Jackman, crossing full over it to take no chances of annoying the border officials; and a few miles further, I dropped to the glaring lights of the International Inspection Field. The formalities were soon finished. I was ready to take-away when Alan rushed at me.

"George! I thought I could connect here." He gripped me. He was wild-eyed, incoherent. He waved his taxi-plane away. "I'm going back with my friend. George, I can't—I don't know what's happened to her. She's gone, now!"

"Who's gone? Babs?"

"Yes." He pushed me into my plane and climbed in after me. "Don't talk. Get us up! I'll tell you then. I shouldn't have left."

When we were up in the air, I swung on him. "What are you talking about? Babs gone?"

I could feel myself shuddering with a nameless horror.

"I don't know what I'm talking about, George. I'm about crazy. The Quebec police think I am, anyway. I been raising hell with them for an hour. Babs is gone. I can't find her. I don't know where she is."

HE finally calmed down enough to tell me. Shortly after his radio-phone to me in New York, he had missed Babs. They had had lunch in the huge hotel and then walked on the Dufferin Terrace—the famous promenade outside looking down over the lower city, the great sweep of the St. Law-

rence River and the gray-white distant Laurentian mountains.

"I was to meet her inside. I went in ahead of her. But she didn't come. I went back to the terrace and she was gone. Wasn't in our rooms. Nor the lobby—nor anywhere."

But it was early afternoon, in the public place of a civilized city. In the daylight of the Dufferin Terrace, beside the long ice toboggan slide, under the gaze of skaters on the ice-rink and several hundred holiday merrymakers, a young girl could hardly be murdered, or forcibly abducted, without attracting some attention! The Quebec police thought the young American unduly excited over his sister, who was missing only an hour. They would do what they could, if by dark she had not rejoined him. They suggested that doubtless the young lady had gone shopping.

"Maybe she did," I agreed. But in my heart, I felt differently. "She'll be waiting for us in the hotel when we get there, Alan."

"But I'm telling you we saw Polter this morning. He lives here—not thirty miles from Quebec. We saw him on the terrace after breakfast. Recognized him at once."

"Did he see you?"

"I don't know. He was lost in the crowd in a minute. But I asked a young French fellow who it was. He knew him. Told me, Frank Raskor. That's the name he wears now. He's a famous man up here—well known, immensely rich. I don't know if he saw us or not. What a fool I was to leave Babs alone, even for a minute!"

We were speeding over a white-clad valley with a little frozen river winding down its middle. Almost full night had come. The leaden sky was low above us. It began snowing. The lights of the small villages along the river were barely visible.

"Can you land us, Alan?"

"Yes, surely. Municipal field just beyond the Citadel. We can get to the hotel in five minutes. Good landing lights."

IT was a flight of only half an hour. During it, Alan told me about Polter. The hunchback, known now as Frank Rascor, owned a mine in the Laurentides, some thirty miles from Quebec City—a fabulously productive mine of gold. It was an anomaly that gold should be produced in this region. No vein of gold-bearing rock had been found, except the one on Polter's property. Alan had seen a newspaper account of the strangeness of it; and just upon the chance had come to Quebec, seen Frank Rascor on the Dufferin Terrace, and recognized him as Polter.

Again my thoughts went back into the past. Had Polter stolen that missing fragment of golden quartz the size of a walnut which had been beneath Dr. Kent's microscope? We always thought so. Dr. Kent had some secret, some great problem upon which he was working. Polter, his assistant, had evidently known, or partially known, its details. And now, four years later, Polter was immensely rich, with a "gold mine" in mountains where there was no other such evidence of gold!

I seemed to see some connection. Alan, I knew, was groping with a dim idea, so strange he hardly dared voice it.

"I tell you, it's weird, George. The sight of him. Polter—heavens, one couldn't mistake that hunchback—and his face, his features, just the same as when we knew him."

"Then what's weird?" I demanded.

"His age." There was a queer solemn hush in Alan's voice. "George, when we knew Polter, he was about twenty-five, wasn't he? Well, that was four years ago. But he isn't twenty-nine now! I swear it's the same man—but he isn't around thirty. Don't ask me what I'm talking about. I don't know. But he isn't thirty. He's nearer fifty! Unnatural! Weird! I felt it, and so did Babs, just that brief look we had at him."

I did not answer. My attention was on managing the plane. The lights of Sevis were under us. Beyond the city

cliffs the St. Lawrence lay in its deep valley; and the Quebec lights, the light-dotted ramparts with the terrace and the great fortress-like hotel showed across the river.

"Better take the stick, Alan. I don't know where the field is. And don't you worry about Babs. She'll be back by now."

BUT she was not. We went to the two connecting rooms in the tower of the hotel which Alan and Babs had engaged. We inquired with half a dozen phone-calls. No one had seen or heard from her. The Quebec police were sending a man up to talk to Alan.

"Well, we won't be here," Alan called to me. He was standing by the window in Bab's room; he was trembling too much to use the phone. I hung up the receiver and went through the connecting door to join him.

Bab's room! It sent a pang through me. A few of her garments were lying around. A negligee was laid out on the dainty little bed. A velvet boudoir doll—she had always loved them—stood on the dresser. Upon this hotel room, in a day, she had impressed her personality. Her perfume was in the air. And now she was gone.

"We won't be here," Alan was repeating. He gripped me at the window. "Look!" In his hand was an ugly-looking, smokeless, soundless automatic of the Essen type. "And I've got another, for you. Brought them up with me."

His face was white and drawn, but his hands abruptly were steady. The tremble was gone out of his voice.

"I'm going after him, George! Now! Understand that? Now! His place is only thirty miles from here, out there in the mountains. You can see it in the daylight—a wall around his property and a stone castle which he built in the middle of it. A gold mine? Hell!"

There was nothing to be seen now out of the window but the snow-filled

V
5
3
M
A
P
3
XUM

darkness, the blurred lights of lower Quebec and the line of dock-lights five hundred feet under us.

"Will you fly me, George?"

"Of course."

I was the one trembling now; the cool feel of the automatic which Alan thrust into my hand seemed suddenly to crystallize Bab's danger. I was here in her room, with the scent of her perfume around me, and this deadly weapon was needed! But the trembling was gone in a moment:

"Yes. Of course, Alan. No use talking to the police. You can't get a search warrant to ransack the castle of a rich man just because you can't find your sister. Come on. You can tell me what his place is like as we go."

BUNDLED in our flying suits we hurried from the hotel, climbed the Citadel slope of the landing field, and in ten minutes were again in the air. The wind sucked at us. The snow now was falling with thick huge flakes. Directed by Alan, I headed out over the ice-filled St. Lawrence, past the frozen Isle d'Orléans, toward Polter's mysterious mountain castle.

Suddenly Alan burst out, "I know what father's secret was, George! I can piece it together now, from little things that were meaningless when I was a kid. He invented the electro-microscope. You know that. The infinitely small fascinated him. I remember he once said that if we could see far enough down into smallness, we would come upon human life!"

Alan's low tense voice was more vehement than I had ever heard it before. "It's clear to me now, George. That little fragment of golden quartz which he wanted me to be so careful of contained a world with human inhabitants! Father knew it, or suspected it. And I think the chemical problem on which he was working aimed for some drug. I know it was a drug they were compounding, Polter said so once, a radio-active drug; I remember listening at the door. A drug, George, capa-

ble of making a human being infinitely small!"

I did not answer when momentarily Alan paused. So strange a thing! My mind whirled with it; struggled to encompass it. And like the meaningless pieces of a puzzle, dropping so easily into place when the key-piece is fitted, I saw Polter stealing that fragment of gold; abducting Dr. Kent—perhaps because Polter himself was not fully acquainted with the secret. And now, Polter up here with a fabulously rich "gold mine." And Babs, abducted by him, to be taken—where?

It set me shuddering.

"Alan!"

"That's what it was!" Alan reiterated. "And Polter, here now with what he calls a 'mine.' It isn't a mine, it's a laboratory! He's got father, too, hidden God knows where! And now Babs. We've got to get them, George! The police can't help us! It's just you and me, to fight this thing. And it's diabolical!"

CHAPTER II

The Girl an Inch Tall

WE soared over the divided channel of the St. Lawrence, between Orleans and the mainland. Montmorency Falls in a moment showed dimly white through the murk to our left, a great hanging veil of ice higher than Niagara. Further ahead, the lights of the little village of St. Anne de Beaupré were visible with the gray-black towering hills behind them. Historic region! But Alan and I had no thoughts for it.

"Swing left, George. Over the mainland. That's St. Anne; we pass this side of it. Put the mufflers on. This damn thing roars like a tower siren."

I cut in the mufflers, and switched off our wing-lights. It was illegal, but we were past all thought of that. We were both desperate; the slow prudent process of acting within the law had nothing to do with this affair. We both knew it.

Our little plane was dark, and amid the sounds of this night blizzard our muffled engine could not be heard.

Alan touched me. "There are his lights; see them?"

We had passed St. Anne. The hills lay ahead—a wild mountainous country stretching northward to the foot of Hudson Bay. The blizzard was roaring out of the north and we were heading into it. I saw, on what seemed a dome-like hill perhaps a thousand feet above the river level, a small cluster of lights which marked Polter's property.

"Fly over it once, George. Low—we can chance it. And find a place to land outside the walls."

We presently had it under us. I held us at five hundred feet, and cut our speed to the minimum of twenty miles an hour facing the gale, though it was sixty or seventy when we turned. There were a score or two of hooded ground lights. But there was little reflection aloft, and in the murk of the snowfall I felt we would escape notice.

We crossed, turned and went back in an arc following Polter's outer curved wall. We had a good view of it. A weird enough looking place, here on its lonely hilltop. No wonder the wealthy "Frank Rascor" had attained local prominence!

THE whole property was irregularly circular, perhaps a mile in diameter covering the almost flat dome of the hilltop. Around it, completely enclosing it, Polter had built a stone and brick wall. A miniature wall of China! We could see that it was fully thirty feet high with what evidently were naked high-voltage wires protecting its top. There were half a dozen little gates, securely barred, with doubtless a guard at each of them.

Within the wall there were several buildings: a few small stone houses suggesting workmen's dwellings; an oblong stone structure with smoke funnels which seemed perhaps a smelter; a huge, dome-like spread of translucent

glass over what might have been the top of a mine-shaft. It looked more like the dome of an observatory—an inverted bowl fully a hundred feet wide and equally as high, set upon the ground. What did it cover?

And there was Polter's residence—a castle-like brick and stone building with a central tower not unlike a miniature of the Chateau Frontenac. We saw a stone corridor on the ground connecting the lower floor of the castle with the dome, which lay about a hundred feet to one side.

Could we chance landing inside the wall? There was a dark, level expanse of snow where we could have done it, but our descending plane would doubtless have been discovered. But the mile-wide inner area was dark in many places. Spots of light were at the little wall-gates. There was a glow all along the top of the wall. Lights were in Polter's house; they slanted out in yellow shafts to the nearby white ground. But for the rest, the whole place was dark, save a dim glow from under the dome.

I shook my head at Alan's suggestion. "We couldn't land inside." We had circled back and were a mile or so off toward the river. "You saw guards down there. But that low stretch outside the gate on this side—"

A plan was coming to me. Heaven knows it was desperate enough, but we had no alternative. We would land and accost one of the gate guards. Force our way in. Once inside the wall, on foot in the darkness of this blizzard, we could hide; creep up to that dome. Beyond that my imagination could not go.

WE landed in the snow a quarter of a mile from one of the gates. We left the plane and plunged into the darkness. It was a steady upward slope. A packed snowfield was under foot, firm enough to hold our shoes, with a foot or so of loose soft snow on its top. The falling flakes whirled around us. The darkness was solid.

V
5
3
M
A
R
3
1
XUM

Our helmeted leather-furred flying suits were soon shapeless with a gathering white shroud. We carried our Essens in our gloved hands. The night was cold, around zero I imagine, though with that biting wind it felt far colder.

From the gloom a tiny spot of light loomed up.

"There it is, Alan. Easy now! Let me go first." The wind tore away my words. We could see the narrow rectangle of bars at the gate, with a glow of light behind them.

"Hide your gun, Alan." I gripped him. "Hear me?"

"Yes."

"Let me go first. I'll do the talking. When he opens the gate, let me handle him. You—if there are two of them—you take the other."

We emerged from the darkness, into the glow of light by the gate. I had the horrible feeling that a shot would greet us. A challenge came, at first in French, then in English.

"Stop! What do you want?"

"To see Mr. Rascor."

We were up to the bars now, shapeless hooded bundles of snow and frost. A man stood in the doorway of a lighted little cubby behind the bars. A black muzzle in his hand was leveled at us.

"He sees no one. Who are you?"

Alan was pressing at me from behind. I shoved back, and took a step forward. I touched the bars.

"My name is Fred Davis. Newspaper man from Montreal. I must see Mr. Rascor."

"You cannot. You may send in your call. The mouthpiece is there—out there to the left. Bare your face; he talks to no one without the face image."

THE guard had drawn back into his cubby; there was only his extended hand and the muzzle of his weapon left visible.

I took a step forward. "I don't want to talk by phone. Won't you open the

gate? It's cold out here. We have important business. We'll wait with you."

Abruptly the gate lattice slid aside. Beyond the cubby doorway was the open darkness within the wall. A scuffed path leading inward from the gate showed for a few feet.

I walked over the threshold, with Alan crowding me. The Essen in my coat pocket was leveled. But from the cubby doorway, I saw that the guard was gone! Then I saw him crouching back of a metal shield. His voice rang out.

"Stand!"

A light struck my face—a little beam from a television sender beside me. It all happened in an instant, so quickly Alan and I had barely time to make a move. I realized my image was now doubtless being presented to Polter. He would recognize me!

I ducked my head, yelling: "Don't do that! You frighten me!"

It was too late! The guard had received a signal. I was aware of its buzz.

From the shield a tiny jet of fluid leaped at me. It struck my hood. There was a heavy, sickening-sweet smell. It seemed like chloroform. I felt my senses going. The cubby room was turning dark; was roaring.

I think I fired at the shield. And Alan leapt aside. I heard the faint hiss of his Essen. And his choked, horrified voice:

"George—come back! Run! Don't fall! Don't!"

I crumpled; slid into blackness. And it seemed, as I went down, that Alan's inert body was falling on top of me....

I RECOVERED consciousness after a nameless interval, a phantasmagoria of wild, drugged dreams. My senses came slowly. At first, there were dim muffled voices and the tread of footsteps. Then I knew that I was lying on the ground, and that I was indoors. It was warm. My overcoat was off. Then I realized that I was bound and gagged.

I opened my eyes. Alan was lying inert beside me, roped and with a black gag around his face and in his mouth. We were in a huge dim open space. Presently, as my vision cleared, I saw that the dome was overhead. This was a circular, hundred-foot-wide room. It was dimly lighted. The figures of men were moving about, their great misshapen shadows shifting with them. Twenty feet from me there was a pile of golden rock—chunks of gold the size of a man's fist, or his head, and larger, heaped loosely into a mound ten feet high.

Beyond this pile of ore, near the center of the room, twenty feet above the concrete floor, there was a large hanging electrolier. It cast a circular glow downward. Under it I saw a low platform raised a foot or two above the ground. A giant electro-microscope was hung with its twenty-foot cylinder above the platform. Its intensification tubes were glowing in a dim phosphorescent row on a nearby bracket. A man sat in a chair on the platform at the microscope's eyepiece.

I saw all this with a brief glance, then my attention went to a white stone slab under the giant lense. It rested on the platform floor, a two-foot-square surface of smooth white stone like marble. A little roped railing a few inches high fenced it. And in its center lay a fragment of golden quartz the size of a walnut!

There was a movement across my line of vision. Two figures advanced. I recognized both of them. And I strained at my bonds; mouthed the gag with futile, horrified effort. I could no more than writhe; and I could not make a sound. I lay, after a moment exhausted, and stared with horror.

The familiar hunched figure of Polter advanced toward the microscope. And with him, his huge hand holding her wrists, was Babs. They were nearly fifty feet from me, but with the light over them I could see them clearly. Babs' slim figure was clad in a long skirted dress—pale blue, now, with the

light on it. Her long black hair had fallen disheveled to her shoulders. I could not see her face. She did not cry out. Polter was half dragging her as she resisted him; and then abruptly she ceased struggling.

I heard his gutteral voice. "That iss better."

THEY mounted to the platform. It seemed to me that they must have been far away; they were very small. Abnormally small. I blinked. Horror surged over me. Their figures were dwindling as they stood there! Polter was saying something to the man at the microscope. Other men were nearby, watching. All normal, save Polter and Babs. A moment passed. Polter was standing by the chair in which the man at the microscope was sitting. And Polter's head barely reached its seat! Babs was clinging to him, now. Another moment. They were both little figures down by the chair-leg. Then they began walking with swaying steps toward the tiny railing of the white slab. The white reflection from the slab plainly illumined them. Polter's arm was around Babs. I had not realized how small they were until I saw Polter lift the rope of the four-inch little fence, and he and Babs stooped and walked under it. The fragment of quartz lay a foot from them in the center of the white surface. They walked unsteadily toward it. But soon they were running.

My horrified senses whirled. Then abruptly I felt something touch my face! Alan and I were lying in shadow. No one had noticed my writhing movements, and Alan was still in drugged unconsciousness. Something tiny and light and soundless as a butterfly wing brushed my face! I jerked my head aside. On the floor, within six inches of my eyes, I saw the tiny figure of a girl an inch high! She stood, with a warning gesture to her lips—a human girl in a filmy flowing drapery. Long pale golden tresses lay on her white shoulders; her face, small

V
5
3
M
A
R
3
XU

as my little fingernail, colorful as a miniature painted upon ivory, was so close to my eyes that I could see her expression—warning me not to move.

There was a faint glow of light on the floor where she stood, but in a moment she moved out of it. Then I felt her brush against the back of my head. My ear was near the ground. A tiny warm hand touched my ear-lobe; clung to it. A tiny voice sounded in my ear.

"Please do not move your head! You might kill me!"

There was a pause. I held myself rigid. Then the tiny voice came again.

"I am Glora, a friend. I have the drug! I will help you!"

CHAPTER III

The Fight in the Shrinking Dome Room

IT seemed that Alan was stirring. I felt the tiny hand leave my ear. I thought that I could hear faint little footfalls as the girl scampered away, fearful that a sudden movement from Alan would crush her. I turned cautiously after a moment and saw Alan's eyes upon me. He too had seen, with a blurred returning consciousness, the dwindling figures of Babs and Polter. I followed his gaze. The white slab with the golden quartz under the microscope seemed empty of human movement. The several men in this huge circular dome-room were dispersing to their affairs; three of them sat whispering by what I now saw was a pile of gold ingots stacked crosswise. But the fellow at the microscope held his place, his eye glued to its aperture as he watched the vanishing figures of Polter and Babs on the rock-fragment.

Alan seemed trying to convey something to me. He could only gaze and jerk his head. I saw behind his head the figure of the tiny girl on the floor behind him. She wanted evidently to approach his head, but did not dare. When for an instant he was quiet, she ran forward, but at once scampered back.

From the group by the ingots, one of the men rose and came toward us. Alan held still, watching. And the girl, Glora, seized the opportunity to come nearer. We both heard her tiny voice:

"Do not move! Close your eyes! Make him think you are still unconscious."

Then she was gone, like a mouse hiding in the shadows near us.

Amazement swept Alan's face; he twisted, mouthed at his gag. But he saw my eager nod and took his cue from me.

I CLOSED my eyes and lay stiff, breathing slowly. Footsteps approached. A man bent over Alan and me.

"Are you no conscious yet?" It was the voice of a foreigner, with a queer, indescribable intonation. A foot prodded us. "Wake up!"

Then the footsteps retreated, and when I dared to look the man was rejoining his fellows. It was a strange-looking trio. They were heavy-set men in leather jackets and short, wide knee-length trousers. One wore tight, high boots, and the others a sort of white buskin, with ankle straps. All were bareheaded—round, bullet heads of close-clipped black hair.

I suddenly had another startling realization. These men were not of normal size as I had assumed! They were eight or ten feet tall at the very least! And they and the pile of ingots, instead of being close to me, were more distant than I had thought.

Alan was trying to signal me. The tiny girl was again at his ear, whispering to him. And then she came to me.

"I have a knife. See?" She backed away. I caught the pin-point gleam of what might have been a knife in her hand. "I will get a little larger. I am too small to cut your ropes. You lie still, even after I have cut them."

I nodded. The movement frightened her so that she leaped backward; but she came again, smiling. The three

men were talking earnestly by the ingots. No one else was near us.

Gloria's tiny voice was louder, so that we both could hear it at once.

"When I free you, do not move or they may see that you are loose. I get larger now—a little larger—and return."

SHE darted away and vanished. Alan and I lay listening to the voices of the three men. Two were talking in a strange tongue. One called to the man at the microscope, and he responded. The third man said suddenly:

"Say, talk English. You know damn well I can't understand that lingo."

"We say, McGuire, the two prisoners soon wake up."

"What we oughta do is kill 'em. Polter's a fool."

"The doctor say, wait for him return. Not long—what you call three, four hours."

"And have the Quebec police up here lookin' fer 'em? An' that damn girl he stole off the terrace— What did he call her, Barbara Kent?"

"These two who are drugged, their bodies can be thrown in a gully down behind St. Anne. That what the doctor plan to do, I think. Then the police find them—days maybe from now—and their smashed airship with them."

Gruesome suggestion!

The man at the microscope called, "They are gone. Almost. I can hardly see them more." He left the platform and joined the others. And I saw that he was much smaller than they—about my own size possibly.

There seemed six men here altogether. Four now, by the ingots, and two others far across the room where I saw the dark entrance of the corridor-tunnel which led to Polter's castle.

Again I felt a warning hand touch my face, and saw the figure of Gloria standing by my head. She was larger now—about a foot tall. She moved past my eyes; stood by my mouth; bent down over my gag. I felt the

cautious slide of a tiny knife-blade inserted under the fabric of the gag. She hacked, tugged at it, and in a moment ripped it through.

She stood panting from the effort. My heart was pounding with fear that she would be seen; but the man had turned the central light off when he left the microscope, and it was far darker here now than before.

I MOISTENED my dry mouth. My tongue was thick, but I could talk.

"Thank you, Gloria."

"Quiet!"

I felt her hacking at the ropes around my wrists. And then at my ankles. It took her a long time, but at last I was free! I rubbed my arms and legs; felt the returning strength in them.

And presently Alan was free. "George, what—" he began.

"Wait!" I whispered. "Easy! Let her tell us what to do."

We were unarmed. Two, against these six, three of whom were giants.

Gloria whispered, "Do not move! I have the drugs. But I can no give them to you when I am still so small. I have not enough. I will hide—there." Her little arm gestured to where, near us, half a dozen boxes were piled. "When I am large as you, I come back. Be ready, quickly to act. I may be seen. I give you then the drug."

"But wait," Alan whispered. "We must know—"

"The drug to make you large. In a moment then you can fight these men. I had planned it for myself, to do that, and then I saw you held captive. That girl of your world the doctor just now steal, she is friend of yours?"

"Yes! Yes, Glora. But—" A thousand questions were springing in my mind, but this was no time to ask them. I amended, "Go! Hurry! Give us the drug when you can."

The little figure moved away from us and disappeared. Alan and I lay as we had before. But now we could whisper. We tried to anticipate what

would happen; tried to plan, but that was futile. The thing was too strange, too astoundingly fantastic.

HOW long Glora was gone I do not know. I think, not over three or four minutes. She came from her hiding place, crouching this time, and joined us. She was, probably, of normal Earth size—a small, frail-looking girl something over five feet tall. We saw now that she was about sixteen years old. We lay staring at her, amazed at her beauty. Her small oval face was pale, with the flush of pink upon her cheeks—a face queerly, transcendently beautiful. It was wholly human, yet somehow unearthly, as though unmarked by even the heritage of our Earthly strife.

"Now! I am ready." She was fumbling at her robe. "I will give you each the same."

Her gestures were rapid. She flung a quick glance at the distant men. Alan and I were tense. We could easily be discovered now, but we had to chance it. We were sitting erect. He murmured:

"But what do we do? What happens? What—"

On the palm of her hand were two small pink-white pellets. "Take these—one for each of you. Quickly!"

Involuntarily we drew back. The thing abruptly was gruesome, frightening. Horribly frightening.

"Quickly," she urged. "The drug is what you call highly radio-active. And volatile. Exposed to the air it is gone very soon. You are afraid? No! No, it will not harm you."

With a muttered curse at his own reluctance, Alan seized the pellet. I stopped him.

"Wait!"

THE men momentarily were engaged in a low-voiced, earnest discussion. I dared to hesitate a moment longer.

"Gloria, where will you be?"

"Here. Right here. I will hide."

"We want to go after Mr. Polter." I gestured. "Into that little piece of golden rock. Is that where he went? Is that where he took the Earth girl?"

"Yes. My world is there—within an atom there in that rock."

"Will you take us?"

"Yes! Yes!"

Alan whispered suddenly, "Then let us go now. Get smaller, now."

But she shook her head vehemently. "That is not possible. We would be seen as we climbed the platform and crossed the white slab."

"No," I protested. "Not if we get very small, hiding here first."

She was smiling, but urgently fearful of this delay. "Should we get that small, then it would be, from here"—she gestured toward the microscope—"to there, a journey of very many miles. Don't you understand?"

This thing so strange!

Alan was plucking at me. "Ready, George?"

"Yes."

I put the pellet on my tongue. It tasted slightly sweet, but seemed quickly melted and I swallowed it hastily. My head swam. My heart was pounding, but that was apprehension, not the drug. A thrill of heat ran through my veins as though my blood were on fire.

Alan was clinging to me as we sat together. Glora again had vanished. In the background of my whirling consciousness the sudden thought hovered that she had tricked us; done to us something diabolical. But the thought was swept away in the confusion of the flood of impressions upon me.

I turned dizzily. "All right, Alan?"

"Yes, I—I guess so."

My ears were roaring, the room seemed whirling, but in a moment that passed. I felt a sudden, growing sense of lightness. A humming was within me—a soundless tingle. To every tiny microscopic cell in my body the drug had gone. The myriad pores of my skin seemed thrilling with activity. I know now it was the exuding volatile gas of this disintegrating drug. Like

an aura it enveloped me, acted upon my garments.

I LEARNED later much of the principles of this and its companion drug. I had no thought for such things now. The huge dimly illuminated room under the dome was swaying. Then abruptly it steadied. The strange sensations within me were lessening, or I forgot them. And I became aware of externals.

The room was shrinking! As I stared, not with horror now, but with amazement and a coming triumph, I saw everywhere a slow, steady, crawling movement. The whole place was dwindling. The platform, the microscope, were nearer than before, and smaller. The pile of ingots, with the men off there, was shifting toward me.

"George! My God—weird!"

I saw Alan's white face as I turned to him. He was growing at the same rate as myself evidently, for of all the scene he only was unchanged.

We could feel the movement. The floor under us was shifting, crawling slowly. From all directions it came, contracting as though it were being squeezed beneath us. In reality our expanding bodies were pushing outward.

The pile of boxes which had been a few feet away, were thrusting themselves at me. I moved incautiously and knocked them over. They seemed small now, perhaps half their former size. Glora was standing behind them. I was sitting and she was standing, but across the litter, our faces were level.

"Stand up!" she murmured. "You all right now. I hide!"

I struggled to my feet, drawing Alan up with me. Now! The time for action was upon us! We had already been discovered. The men were shouting, clambering to their feet. Alan and I stood swaying. The dome-room had contracted to half its former size. Near us was a little platform, chair and microscope. Small figures of men were rushing at us.

I shouted, "Alan! Watch yourself!"

WE were unarmed. These men might have automatics. But evidently they did not. Knives were in their hands. The whole place was ringing with shouts. And then a shrill siren alarm from outside was clanging.

The first of the men—a few moments before he had seemed a giant—flung himself upon me. His head was lower than my shoulders. I met him with a blow of my fist in his face. He toppled backward; but from one side, another figure came at me. A knife-blade bit into the flesh of my thigh.

The pain seemed to fire my brain. A madness descended upon me. It was the madness of abnormality. I saw Alan with two dwarfed figures clinging to him. But he threw them off, and they turned and ran.

The man at my thigh stabbed again, but I caught his wrist and, as though he were a child, whirled him around me and flung him away. He landed with a crash against the shrunken pile of gold nuggets and lay still.

The place was in a turmoil. Other men were appearing from outside. But they stood now well away from us. Alan backed against me. His laugh rang out, half hysterical with the madness upon him as it was upon me.

"God! George, look at them! So small!"

They were now hardly the height of our knees. This was now a small, circular room, under a lowering concave dome. A shot came from the group of pygmy figures. I saw the small stab of flame, heard the sing of the bullet.

We rushed, with the full frenzy of madness upon us, enraged giants. What actually happened I can not recount. I recall scattering the little figures; seizing them; flinging them headlong. A bullet, tiny now, stung the calf of my leg. Little chairs and tables under my feet were crashing. Alan was lunging back and forth; stamping; flinging his tiny adversaries away. There were twenty or thirty of the fig-

ures here now. Then I saw some of them escaping.

The room was littered with wreckage. I saw that by some miracle of chance the microscope was still standing, and I had a moment of sanity.

"Alan, watch out! The microscope! The platform—don't smash it! And Glora! Look out for her!"

I SUDDENLY became aware that my head and a shoulder had struck the dome roof. Why, this was a tiny room! Alan and I found ourselves backed together, panting in the small confines of a circular cubby with an arching dome close over us. At our feet the platform with the microscope over it hardly reached our boot-tops. There was a sudden silence, broken only by our heavy breathing. The tiny forms of humans strewn around us were all motionless. The others had fled.

Then we heard a small voice. "Here! Take this! Quickly! You are too large! Quickly!"

Alan took a step. And then a sudden panic was on us both. Glora was here at our feet. We did not dare turn; hardly dared move. To stoop might have crushed her. My leg hit the top of the microscope cylinder. It rocked but did not fall.

Where was Glora? In the gloom we could not see her. We were in a panic.

Alan began, "George, I say—"

The contracting inner curve of the dome bumped gently against my head. The panic of confusion which was upon us turned to fear. The room was closing in to crush us.

I muttered, "Alan! I'm going out!" I braced myself and heaved against the side and top curve of the dome. Its metal ribs and heavy translucent, reinforced glass plates resisted me. There was an instant when Alan and I were desperately frightened. We were trapped, to be crushed in here by our own horrible growth. Then the dome yielded under our smashing blows. The ribs bent; the plates cracked.

We straightened, pushed upward and emerged through the broken dome, with head and shoulders towering into the outside darkness and the wind and snow of the blizzard howling around us!

CHAPTER IV

The Journey Into Smallness

"**G**LORA, that—that was horrible." We stood, again in normal size, with the wrecked dome-laboratory around us. The dome had a great jagged hole halfway up one of its sides, through which the snow was falling. The broken bodies strewn around were gruesome.

Alan repeated, "Horrible, Glora. This drug, the power of it, is diabolical."

Glora had grown large after us; had given us the companion drug. I need not detail the strange sensations of our dwindling. We were so soon to experience them again!

We had searched, when still large, all of Polter's grounds. Some of his men undoubtedly escaped, made off into the blizzard. How many, we never knew. None of them ever made themselves known again.

We were ready to start into the atom. The fragment of golden quartz still lay under the microscope on the white square of stone slab. We had hurried with our last preparations. The room was chilling. We were all inadequately dressed for such cold.

I left a note scribbled on a square of paper by the microscope. With daylight, Polter's wrecked place would be discovered. The police would come.

"Guard this piece of golden quartz. Take it at once, very carefully, to the Royal Canadian Scientific Society. Have it watched day and night. We will return."

I signed it George Randolph. And as I did so, the extraordinary aspect of these events swept me anew. Here in Polter's weird place I had seemed living in some strange fantastic realm.

But this was the Province of Quebec, in civilized Canada. These were the Quebec authorities I was addressing.

I flung the thoughts away. "Ready, Glora?"

"Yes."

THEN doubts assailed me. None of Polter's men had gotten large to fight us. Evidently he did not trust them with the drug. We could well believe that, for the thing, misused, was diabolical beyond human conception. A single giant, a criminal, a madman, by the power of giant size alone, could devastate the earth! The drug, lost, or carelessly handled, could get loose. Animals, insects, eating it, could roam the earth, gigantic monsters! Vegetation, nourished with it, might in a day overrun a great city, burying it with a jungle growth!

How terrible a thing, if the realm of smallness were suddenly to emerge! Monsters of the sea, marine organisms, could expand until even the ocean was too small for them. Microbes of disease, feeding upon this drug—

Alan was gripping me. "We're ready, George."

"Yes. Yes, I'm ready."

This was not largeness we were facing now, but smallness. I thought of Babs, down there with Polter, beyond the vanishing point in the realm of the infinitely small. They had been gone an hour at least. Every moment lost now was adding to Bab's danger.

"Yes, I'm ready, Alan."

Glora sat with us on the platform. Strange little creature! She was wholly calm now; methodical with her last directions. There had been no time for her to tell us anything about herself. Alan had asked her why she had come here and how she had gotten the drugs. She waved him away:

"On the journey down. Plenty of time, then."

"How long?" Alan demanded.

"Not too long. If we are careful with managing the trip, what you might call ten hours."

AND now as we were ready to start, she told us calmly:

"I will give you each your share of the drugs, but them you take only as I tell you."

She produced from her robe several small vials a few inches long. They were tightly stoppered. The feel of them was cool and sleek; they seemed of some strange, polished metal. Some of them were tinted black while the others glowed opalescent. She gave each of us one vial of each kind.

"The light ones are for diminishing," she said. "We take them very carefully, one small pellet only at first."

Alan was opening one of his, but she checked him.

"Wait! The drug evaporates very quickly. I have more to say, first. We sit here together. Then you follow me to the white slab. We climb upon the little rock."

She laid her hands on our arms. Her blue eyes regarded us earnestly. Her manner was naive; childlike. But I could not mistake her intelligence; the force of character stamped on her face for all its dainty, ethereal beauty.

"Alan—" She smiled at him, and tossed back a straying lock of her hair which was annoying her. "You pay attention, Alan. You are very young, reckless. You listen. We must not be separated. You understand that, both of you? We will be always in that little piece of rock. But there will be miles of distance. And to be lost in size—"

Strange journey upon which now we were starting! Lost in size?

"You understand me? Lost in size. If that happens, we might never find each other. And if we come upon the Doctor Polter and the girl he holds captive—if we can overtake them—"

"We must!" I exclaimed. "And we must start, Glora!"

"Yes. Now!"

SHE showed us which pellet to select. They were of several sizes, I found. And as she afterward told us,

V
5
3
M
A
R
3
XUI

the larger ones were not only larger but of an intensified strength. We took the smallest. It was barely a thousandth part of the strength of the largest. In unison we placed the pellets on our tongues, and hastily swallowed.

The first sensations were as before. And, familiar now, they caused no more than a fleeting discomfort. But I think I could never get used to the outward strangeness!

The room in a moment was expanding. I could feel the platform floor crawling outward beneath me, so that I had to hitch and change my position as it pulled. We were seated together, Alan and I on each side of Glora. My fingers were on her arm. It did not change size, but it slowly drew away with a space opening between us. Overhead, the dome-roof, the great jagged hole there, was receding, lifting, moving upward and away.

Glora pulled us to our feet. "We had better start now. The distance is so far, so quickly."

We had been sitting within five feet of the stone slab with its little four-inch-high railing around it. A chair was by the microscope eyepiece. As we stood swaying I saw that the chair was huge, and its seat level with my head. The great barrel-cylinder of the microscope slanted sixty feet upward. The dome-roof was a distant spread three hundred feet up in the dimness. This gigantic room! It was a vast arena now.

Alan and I must have hesitated, confused by the expanding scene—a slow steady movement everywhere. Everything was drawing away from us. Even as we stood together, the creeping platform floor was separating us.

A moment passed. Glora was urging vehemently:

"Come! You must not stand!"

We started walking. The railing around the slab was knee-high. The slab itself was a broad square surface. The fragment of golden quartz lay in its center. It was now a jagged lump nearly a foot in diameter!

THE platform seemed shifting as we walked; the railing hardly came closer as we advanced toward it. Then suddenly I realized it was receding. Thirty feet away? No, now it was more than that—a great, thick rope, waist-high, with a huge spread of white surface behind it.

"Faster!" urged Glora. We ran, and reached the railing. It was higher than our heads. We ran under it, and out upon the white slab—a level surface, larger now than the whole dome-room had been.

Glora, like a fawn ran in advance of us, her draperies flying in the wind. She turned to look back.

"Faster! Faster—or it will be too hard a climb!"

Ahead lay a golden mound of rock. It was widening; raising its top steadily higher. Beyond it and over it was a vast dim distance. We reached the rock, breathless, winded. It was a jagged mound like a great fifty-foot butte. We plunged upon it, began climbing.

The ascent was steep; precipitous in places. There were little gullies, which expanded as we climbed up them. It seemed that we should never reach the top, but at last we were there. I was aware that the drug had ceased its action. The yellow rocky ground was no longer expanding.

We came to the summit and stood to get back our breath. And Alan and I gazed with awe upon the top of a rocky hill. Little buttes and strewn boulders lay everywhere. It was all naked rock, ridged and pitted, and everywhere yellow-tinged.

Overhead was distance. I could not call it a sky. A blur was there—something almost but not quite distinguishable. Then I thought that I could make out a more solid blur which might be the lower lens of the microscope above us. And there were blurred, very distant spots of light, like huge suns masked by a haze, and I knew that they were the hooded lights of the laboratory room.

BEFORE us, over the brink of a five hundred-foot cliff, a great glistening white plain stretched into the distance. I seemed to see where it ended in a murky blur. And far higher than our own hilltop level a horizontal streak marked the rope railing of the slab.

"Well," said Alan, "we're here." He gazed behind us, back across the rocky summit which seemed several hundred feet across to its opposite brink. He was smiling, but the smile faded. "Now what, Glora? Another pellet?"

"No. Not yet. There is a place where we go down. It is marked in my mind."

I had a sudden ominous sense that we three were not alone up here. Glora led us back from the cliff. As we picked our way among the naked crags, it seemed behind each of them an enemy might be lurking.

"Gloria, do you know if any of Dr. Polter's men have the drug? I mean, do they come in and out here?"

She shook her head. "I think not. He lets no one have the drug. He trusts not any one. I stole it; I will tell you later. Much I have to tell you before we arrive."

Alan made a sudden sidewise leap, and dashed around a rock. He came back to us, smiling ruefully.

"Gets on your nerves, all this. I had the same idea you did, George. Might be someone around here. But I guess not." He took Glora's hand and they walked in advance of me. "We haven't thanked you yet, Glora."

"Not needed. I came for help from your world. I could not get back to my own, and I followed the Doctor Polter when he came outward. He has made my world, my people, his slaves. I came for help. And because I have helped you needs no thanks."

"But we do thank you, Glora." Alan turned his flushed, earnest face back to me. I thought I had never seen him so handsome, with his boyish, rugged features, and shock of tousled brown hair. The grimness of adventure was

upon him, but in his eyes there was something else. It was not for me to see it. That was for Glora; and I think that even then its presence and its meaning did not escape her.

"Stay close, George."

"Yes."

WE reached a little gully near the center of the hilltop. It was some twenty feet deep. Glora paused.

"We descend here."

The gully was an unmistakable landmark—open at one end, forty feet long, with the other end terminating in a blind wall, smoothly precipitous. We retraced our steps, entered the gully at its open end, and walked its length. Glora paused by the wall which now loomed above us.

"A pit is here—a hole. I cannot tell just how large it will look when we are in this size."

We found and stood over it—a foot-wide circular hole extending downward. Alan abruptly knelt and shoved his hand and arm into it, but Glora sprang at him.

"Don't do that!"

"Why not? Is this it? How deep is it?"

She retorted sharply, "The Doctor Polter is ahead of us. How far away in size, who knows? Do you want to crush him, and crush that young girl with him?"

Alan's jaw dropped. "Good Lord!"

We stood with the little pit before us, and another of the pellets ready.

"Now!" said Glora.

Again we took the drug, a somewhat larger pellet this time. The familiar sensations began. Everywhere the rocks were creeping with a slow inexorable movement, the landscape expanding around us. The gully walls drew back and upward. In a moment they were precipice cliff-walls and we were in a broad valley.

We had been standing close together. We had not moved, except to shift our feet as the expanding ground drew them apart. I became aware that

V
5
3
M
A
R
3
E
XUM

Alan and Glora were a distance from me. Glora called:

"Come, George! We go down, quickly now."

WE ran to the pit. It had expanded to a great round hole some six feet wide and equally as deep. Glora let herself down, peered anxiously beneath her, and dropped. Alan and I followed. We jammed the pit; but as we stood there, the walls were receding and lifting.

I had remarked Glora's downward glance, and shuddered. Suppose, in some slightly smaller size, Babs had been here among these rocks!

The pit widened steadily. The movement was far swifter now. We stood presently in a great circular valley. It seemed fully a mile in diameter, with huge encircling walls like a crater rim towering thousands of feet into the air. We ran along the base of one expanding wall, following Glora.

I noticed now that overhead the turgid murk had turned into the blue of distance. A sky. It was faintly sky-blue, and there seemed a haze in it, almost as though clouds were forming. It had been cold when we started. The exertion had kept us fairly comfortable; but now I realized that the air was far warmer. It was a different air, more humid, and I thought the smell of moist earth was in it. Rocks and boulders were strewn here on the floor of this giant valley, and I saw occasional pools of water. There had been rain recently!

The realization came with a shock of surprise. This was a new world! A faint, luminous twilight was around us. And then I noticed that the light was not altogether coming from overhead. It seemed inherent to the rocks themselves. They glowed very faintly luminous, as though phosphorescent.

We were now well embarked upon this strange journey. We spoke seldom. Glora was intent upon guiding us. She was trying to make the best possible speed. I realized that it was

a case of judgment, as well as physical haste. We had dropped into that six-foot pit. Had we waited a few moments longer, the depth would have been a hundred feet, two hundred, a thousand! It would have involved hours of arduous descent—if we had lingered until we were a trifle smaller!

WE took other pellets. We traveled perhaps an hour more. There were many instances of Glora's skill. We squeezed into a gully and waited until it widened; we leaped little expanding caverns; we slid down a smooth yellowish slide of rock like a child's toboggan, and saw it behind and over us, rising to become a great spreading ramp extending upward into the blue of the sky. Now, up there, little sailing white clouds were visible. And down where we stood it was deep twilight, queerly silvery with the phosphorescence from the luminous rocks as though some hidden moon were shining.

Strange, new world! I suddenly envisaged the full strangeness of it. Around me were spreading miles of barren, naked landscape. I gazed off to where, across the rugged plateau we were traversing, there was a range of hills. Behind and above them were mountains; serrated tiers; higher and more distant. An infinite spread of landscape! And, as we dwindled, still other vast reaches opened before us. I gazed overhead. Was it—compared to my stature now—a thousand miles, perhaps even a million miles up to where we had been two or three hours ago? I think so.

Then suddenly I caught the other viewpoint. This was all only an inch of golden quartz—if one were large enough to see it that way!

Alan had been trying to memorize the main topographical features of our route. It was not as difficult as it seemed at first. We were always far larger than normal to our environment. The main distinguishing characteristics of the landscape were obvious—the

blind gully, with the round pit, for instance, or the ramp-slide.

We had been traveling some three or four hours when Glora suggested a rest. We were at the side-wall of a broad canyon. The wall towered several hundred feet above us; but a few moments before we had jumped down it with a single leap!

THE drug we had last taken had ceased its action. We sat down to rest. It was a wild, mountainous scene around us, deep with luminous gloom. We could barely see across the canyon to its distant cliff-wall. The wall beside us had been smooth, but now it was broken and ridged. There were ravines in it, and dark holes like cave-mouths. One was near us. Alan gazed at it apprehensively.

"I say, Glora, I don't like sitting here."

I had been telling her all we knew of Polter. She listened quietly, seldom interrupting me. Then she said:

"I understand. I tell you now about Polter as I have seen him."

She talked for five or ten minutes. I listened amazed, awed by what she told.

But Alan suddenly interrupted her. "I say, let's move away from here. That tunnel-mouth, or cave, whatever it is—"

"But we go in there," she protested. "A little tunnel. That is our way to travel. We are not far from my city now."

Perhaps Alan felt what a generation ago they called a hunch, a premonition, the presage of evil which I think comes strangely to us more often than we realize. Whatever it was, we had no time to act upon it. The tunnel-mouth which had caused Alan's apprehension was about a hundred feet away. It was a ten-foot, black yawning hole in the cliff. Perhaps Alan sensed a movement off there. As I turned to gaze, from the opening came a great hairy human arm! Then a shoulder! A head!

The giant figure of a man came

squeezing through the hole on his hands and knees! He gathered himself, and as he stood erect, I saw that he was growing in size! Already he was twenty feet tall compared to us—a thick-set fellow, dressed in leather garments, his legs and bare arms heavily matted with black hair. He stood swaying, gazing around him. I stared up at his round bullet head, his villainous face.

He saw us! Stupid amazement struck him, then comprehension.

He let out a roar and came at us!

CHAPTER V

The Message from Polter

G LORA shouted, "Into the tunnel! This way!" She held her wits and darted to one side, with Alan and me after her. We ran through a narrow passage between two fifty-foot boulders which lay close together. Momentarily the giant was out of sight, but we could hear his heavy tread and his panting breath. We emerged; had passed him. He was taller now. He seemed confused at our sudden scampering activity. He checked his forward rush, and ran around the twin boulders. But we had squeezed into a narrow ravine. He could not follow. He threw a rock: to us it was a boulder. It crashed behind us. To him, we were like scampering insects; he could not tell which way we were about to dart.

Alan panted, "Gloria, this—does this lead out?"

The little ravine seemed to open fifty feet ahead of us. Alan stopped, seized a chunk of rock, flung it up. I saw the giant's face above us. He was kneeling, try to reach in. The rock hit him in the forehead—a pebble, but it stung him. His face rose away.

Again we emerged. The tunnel-mouth was near us. We reached it and flung ourselves into its ten-foot width just as the giant came lunging up. He was far larger than before. Looking back, I could see only the lower part

V
5
—
3

M
A
R
E
XUM

of his legs blocked against the outer light.

"Gloria! Alan, where are you?"

For a moment I did not see them. It was darker in this tunnel; broken rocky walls, a jagged arching roof ten feet high. Then I heard Alan's voice.

"George! Here!"

They came running to me. For a moment we stood, undecided what to do. My eyes were growing accustomed to the darkness; it was illumined by a dim phosphorescence from the rocks. I saw Alan fumbling for his vials, but Gloria stopped him.

"No! We are the right size."

WE were a hundred feet back from the opening. The giant's legs disappeared. But in a moment the round light hole of the exit was obscured again. His head and shoulders! He was lying prone. His great arms came in. He hitched forward. The width of his expanding shoulders wedged.

I think that he expected to reach us with a single snatch of his tremendous arms. Or perhaps he was confused, and forgot his growth. He did not reach us. His shoulders stuck. Then suddenly he was trying to back out, but could not!

It was only a moment. We stood in the radiant gloom of the tunnel, clinging to each other, ourselves stricken by confusion. The giant's voice roared, reverberating around us. Anger. A note of fear. Finally stark terror. He heaved, but the rocks of the opening held solid. Then there was a crack, a gruesome rattling, splintering—his shoulder bones breaking. His whole gigantic body gave a last convulsive lunge, and he emitted a deafening shrill scream of agony.

I was aware of the tunnel-mouth breaking upward. Falling rocks—an avalanche, a cataclysm around us. Then light overhead.

The giant's crushed body lay motionless. A pile of boulders, rocks and loose metallic earth was strewn upon

his head and torso, illumined by the outer light through a jagged rent where the cliff-face had fallen down.

We were unhurt, crouching back from the avalanche. The giant's mangled body was still expanding; shoving at the litter of loose rocks. In a moment it would again be too small for the broken cliff opening.

I found my wits. "Alan! Out of here—God! Don't you see—"

BUT Gloria held us. The drug the giant had taken was about at its end, and Gloria recognized it. The growth presently stopped. That huge, noisome mass of pulp which once had been human shoulders—

I shoved Gloria away. "Don't look!" I was shaking; my head was reeling. Alan's face, painted by the phosphorescence, was ghastly.

Gloria pulled at us. "This way! The tunnel is not too long. We go."

But the giant had drugs. And perhaps weapons. "Wait!" I urged. "You two wait here. I'll climb over him."

I told them why, and ran. I can only leave to the imagination that brief exploratory climb. The broken body seemed at least a hundred feet long; the mangled shoulders and chest filled the great torn hole in the cliff. I climbed over the litter. Indescribable, horrible scene! A river of warm blood was flowing down the declivity outside. . . .

I came back to Gloria and Alan. Under my arm was a huge cylinder vial. It was black—the enlarging drug. I set it down. They stared at me in my blood-stained garments.

"George! You're—"

"His blood, not mine, Alan." I tried to smile. "There's the drug he carried. Evidently Polter was only sending him out. Just the one drug."

"What'll we do with it?" Alan demanded. "Look at the size of it!"

"Destroy it," said Gloria. "See, that is not difficult." She tugged at the huge stopper, and exposed a few of

the pellets—to us as large as apples. "The air will soon spoil it."

We left it in the tunnel. I had brought a great roll of paper; had found it folded in the giant's belt, with the drug cylinder. We unrolled it, and hauled its folds to a spread some ten feet long. It was covered with a scrawled handwriting in pencil, but its giant characters seemed thick blurred strokes of charcoal. We could not read it; we were too close. Alan and Glora held it up against the tunnel wall. From a distance I could make it out. It was a note written in English, signed "Polter," evidently to one of his men.

I read it:

"The two men prisoners, kill them at once. That is better. It will be too dangerous to wait for my return. Put their bodies with their airplane. Crash it a mile or more from our gate."

Full directions for our death followed. And Polter said he would return by dawn or soon after.

IT gave me a start. By dawn! We had been traveling four or five hours. The dawn was up there now!

"No," said Glora. She and Alan cast away the paper. "No, the time in here is different. A different time-rate. I do not know how much difference. My world speeds faster; yours is very slow. It is not the dawn up there quite yet."

Again my mind strove to encompass these things so strange. A faster time-rate prevailed in here? Then our lives were passing more quickly. We were living, experiencing things, compressed into a shorter interval. It was not apparent; there was nothing to which comparison could be made. I recalled Alan's description of Polter—not thirty years old as he should have been, but nearer fifty. I could understand that, now. A day in here—while our gigantic world outside might only have progressed a few hours.

We walked the length of the tunnel. I suppose it was a quarter of a mile,

to us in this size. I wound through the cliff with a steady downward slope. And suddenly I realized that we had turned downward nearly half the diameter of a circle! We had turned over—or at least it seemed so. But the gravity was the same. I had noticed from the beginning very little change.

The realization of this turning brought a mental confusion. I lost all sense of direction. The outer world of Earth was under my feet, instead of overhead. Then we went level. I forgot the confusion; this was normality here. We turned upward a little. Cross tunnels intersected ours at intervals. I saw caverns, open, widened tunnels, as though this mountain were honeycombed.

"Look!" said Glora. "There is the way out. All these passages lead the same way."

THERE was a glow of light ahead. I recall that I was at that moment fumbling at my belt in two small compartments of which I was carrying the two vials of the drugs which Glora had given me. Alan wore the same sort of belt. We had found them in the wrecked dome-room. I heard a click on the ground at my feet. I was about to stoop to see what I had kicked—only a loose stone, perhaps—but Glora's words distracted me. I did not stoop. If only I had, how different events might have been!

The glow of light ahead of us widened as we approached, and presently we stood at the end of the tunnel. A spread of open distance was outside. We were on a ledge of a rocky, precipitous wall some fifty feet above a wide level landscape. Vegetation! I saw trees—a forest off to the left. A range of naked hills lay behind it. A mile away, in front and to the right, a little town nestled on the shore of shining water. There was starlight on the water! And over it a vast blue-purple sky was studded with stars!

I gazed, with that first sudden shock of emotion, into illimitable depths of

interplanetary space! Light years of distance. Gigantic worlds, blazing suns off there shrunken by distance now to little points of light. A universe was here!

But this was an inch of golden quartz!

Above my head were stars which, compared to my bodily size now, were vast worlds ten thousand light-years away! Yet, from the other viewpoint, I had only descended perhaps an eighth or a quarter of an inch beneath the broken pitted surface of a little fragment of golden quartz the size of a walnut—into just one of its myriads of golden atoms!

CHAPTER VI

The Girl in the Golden Cage

MY world," Glora was saying. "You like it? See the starlight on the lake? I have heard that your world looks like this at night, in summer. Ours is always like this. No day, no night. Just like this—starlight." Her hand went to Alan's shoulder. "You like it? My world?"

"Yes. Yes, Glora. It's beautiful."

There seemed a sheen on everything, a soft, glowing sheen of phosphorescence from the rocks rising to meet the pale wan starlight. The night air was soft, with a gentle breeze that rippled the distant lake into a great spread of gold and silver light.

The city was called Orena. I saw at once that we were about normal size to its houses and people. There were fields beneath our ledge, with farm implements lying in them; no workers, for this was the time for sleep. Ribbons of roads wound over the country, pale streamers in the starlight.

Glora gestured, "The giants are on their island. Everyone sleeps now. You see the island off there?"

Beyond the city, over the low stone roofs of its flat-topped dwellings, the silver spread of lake showed a green-clad island some three miles off shore. The distance made its white stone

houses seem small. But as I gazed, I realized that they were large to their environment, all far larger than those of the little town. The island was perhaps a mile in length. Between it and the mainland a boat was coming toward us. It was a dark blob of hull on the shining water, and above it a queerly shaped circular sail was puffed out like a balloon-parachute by the wind.

"**T**HE giants live there?" said Alan.

"You mean Polter's men?"

"And women. Yes."

"Are there many giants?"

"No."

"How many?" I put in. "How large are they? In relation to us now, I mean. And to your normal size?"

I turned to Alan. "Polter and Babs must be down there now! They must have arrived only recently. But we must determine what size to be before we go any further. We can't be gigantic. If he sees us—if we assailed him—well, he'd kill Babs. We've got to plan. Glora tell us—"

"You ask so many questions so fast, George. There are two hundred or more of the giants. And there are more than that many thousands of our people here. Slaves, because the giants are four times as large. This little city, these fields, these hills of stone and metal, all this was ours to have in peace and happiness—until your Polter came. And that starlight on the water—"

She gestured. "Everywhere is a great reach of desert and forests. Insects, but there are no wild beast—nothing to harm us. Nature is kind here. The weather is always like this. We were happy—until Polter came."

"And only a few thousand people," Alan said. "No other cities?"

"What lies off in the great distance we do not know. Our nation is ten times what is here. A few other cities, though some of our people live in the forests—"

She broke off. "That boat is coming for Polter. He is in the city, no doubt

of that. The boat will take him and that girl you call Babs, to the giant's island. His castle is there."

IF we could get on that boat and go with him to the island—! But in what size? Very small? But then, if we were very small it would take us hours to get from here to the boat. Glora pointed out where it would land—just beyond the village where the houses were set in a sparse fringe. It would be there, apparently, in ten or fifteen minutes. Polter was probably there now with Babs, waiting for it.

In our present size we could not get there in time. It was two or three miles at least. But a trifle larger—the size of one of Polter's giants—would enable us to make it. We would be seen, but in the pale starlight, keeping away from the city as much as possible, we might only be mistaken for Polter's people. And when we got closer we would diminish our size, creep into the boat, get near Babs and Polter and then plan what to do.

Futile plans! All of life is so futile, so wind-swept upon the tossing sea of chance!

We climbed down from the ledge and stood at the base of the towering cliff which reared its jagged wall against the stars. A field and a road were near us. The road seemed of normal size. A man was across the field. He did not seem to notice us. He was apparently about my height. He presently discarded his work, went away from us and vanished.

"Hurry, Glora." Alan and I stood beside her while she took pellets from her vials. It needed a careful adjustment. We wanted our stature now to be four times what it was. Glora gave us pellets of both drugs, one of which was slightly more intense than the other.

"Polter made them this way," she said. "The two at once gives just the growth to take us from this normal size to the stature of the giants."

Alan and I did not touch our own

vials. We had used none of our enlarging drug upon the journey; the supply she had given us of the other was nearly gone.

AS I took these pellets which Glora now gave us, standing there by the side of that road, I recall that I was struck with the realization that never once upon this journey had I conceived myself to be other than normal stature. I am normally about six feet tall. I still felt—there in that golden atom—the same height. This landscape seemed of normal size. There were trees nearby—spreading, fantastic looking growths with great strings of pods hanging from them. But still, as I looked up to see one arching over me with its blue-brown leaves and an air-vine carrying vivid yellow blossoms—whatever the size of the tree, my consciousness could only conceive myself as of a normal six-foot stature standing beneath it. The human ego always is supreme! Around each man's consciousness of himself the entire universe revolves!

We crouched on the ground when this growth now began; it would not do to be observed changing size. Polter's giants never did that. Years before, he had made them large—his few hundred men and women. They were, Glora said, people both of this realm and from our great world above—dissolute, criminal characters who now had set themselves up here as the nucleus of a ruling race.

In a moment now, we were the size of these giants. Twenty to twenty-five feet tall, in relation to this environment. But I did not feel so. As I stood up—still myself in normal stature—I saw around me a shrunken little landscape. The trees, as though in a Japanese garden, were about my own height; the road was a smooth level path; the little field near us a toy fence around it. In another road across it, the man was walking. In height he would barely have reached my knees. He saw us rise beside the trees. He

V
5
—
3

M
A
R
E
3
XU

darted off his road in alarm, and disappeared.

IHAVE taken longer to tell all this than the actual time which passed. We could see the boat coming from the island, and it was still a fair distance off shore. We ran along the road, skirting the edge of the little town. Its houses were none of them taller than ourselves. The windows and doorways were ovals into which we could only have inserted a head or an arm. They were most of them dark. Little people occasionally stared out, saw us run past, and ducked back, thankful that we did not stop to harass them.

"This way," said Glora. She ran like a faun, hardly winded, with Alan and me heavily panting behind her. "There are trees—thick trees—quite near where the boat lands. We can get in them and hide and change our size to smallness. But hurry, for we will need so much time when we are small!"

The little spread of town and the shining lake remained always to our right. In five minutes we were past most of the houses. A patch of woods, with thick interlacing treetops about our own height, lay ahead. It extended a few hundred feet over to the lake shore. The sailboat was heading in close. There was a broad, starlit roadway at the edge of the lake, and a dock there at which the boat was preparing to land.

Would we be in time? I suddenly feared not. To get small now, with distance lengthening between us and the boat, would be disastrous. And where was Polter?

Abruptly we saw him. There had been only little people visible to us; none of our own height. The lake roadway by the dock was brightly starlit. As we approached the intervening patch of woods it seemed that a crowd of little people were near the dock. Polter must have been sitting. But now he rose up. We could not mistake his hunched thick figure, the lump on his shoulders clear in the starlight

with the gleaming lake as a background. The crowd of little figures were milling around his knees. In the silence of the night the murmur of their voices floated over to us.

"There he is!" Alan gasped. We all three checked our running; we were at the edge of the patch of woods. "By God, there he is! Let's get larger! Rush him! Why that's only a few hundred feet over there!"

But Babs? Where was Babs?

"Alan! Down!" I crouched, pulling Alan and Glora with me. "Don't let him see us! He'd know at once—and where is Babs? Can't rush him, Alan. He'd see us coming—kill her—"

OF all the strange events which had been flung at us, I think this sudden crisis now most confused Alan and me. To get larger, or smaller? Which? Yet something must be done at once.

Gloria said, "We can get through the woods best in this size. And not be seen—get closer to the landing."

We crouched so that the little tree-tops were always well over us. The patch of woods was dark. A soil of black loam was under us, a thick soft underbrush reached our knees, and lacy, flexible leaves and branches were at our shoulder height. We pushed them aside, forcing our way softly forward. It was not far. The little murmuring voices of the crowd grew louder.

Presently we were crouching at the other edge of the woods. I softly shoved the tree branches aside until we could all three get a clear view of the strange scene now directly before us.

And I saw a toy dock, at which a twenty-foot, barge-like open sailboat was landing; a narrow starlit roadway, crowded with a milling throng of people all no more than a foot and a half in height. The crowd milled almost to where we were crouching, unseen in the shrubbery.

Across the road by the dock, Polter stood with the crowd down around his knees. In height he seemed the old fa-

miliar Polter. Bareheaded, with his shaggy black hair shot with white. He was dressed in Earth fashion: narrow black evening trousers and a white shirt and collar with flowing black tie. I saw at once what Alan had noticed—the change in him. An abnormality of age. I would have called him now forty, or older. Beyond even that there was an abnormality. A man old before his time; or younger than he should have been for the years he had lived. An indescribable mingling of something. The mingling of the two worlds, perhaps. It marked him with a look at once unnatural and sinster.

These were instant impressions. Glora was plucking at me. "On the white chest of his shirt, something is there."

POLTER was coatless, with snowy white shirt and cuffs to his thick wrists. He was no more than fifty feet from us. On his shirt bosom something golden in color was hanging like a large bauble, an ornament, an insignia. It was strapped tightly there with a band about his chest, a cord like a necklace chain up to his thick hunched neck, and other chains down to his belt.

I stared at it. An ornament, like a cube held flat against his shirt-front—a little golden cube, ornate with tiny bars.

I heard Alan murmuring, "A cage! Why George, it's—"

And then, simultaneously, realization struck me. It was a golden cage strapped there. And I seemed to see that there was something in it. A tiny figure? Babs!

"I think he has her there," Glora murmured. "You see the little box with bars? The girl Babs, a prisoner in there." She spoke swiftly, vehemently. "He will take the boat to the island."

She suddenly gripped us. "You think really it best to go? I do what you say. I had the wish to get to my father with these drugs."

"No!" exclaimed Alan. "We must keep close to Polter!"

We were ready with our pellets. But a sudden activity in the road made us pause. The crowd of little people were hostile to Polter. A sullen hostility. They milled about him as he stood there, gazing down at them sardonically.

And abruptly he shouted at them in English. "You speak my language, some of you. Then listen."

The crowd fell silent.

"Listen. This is your future Queen. Can you see her? She is small now. But she has the magic power. Soon she will be large. Like me."

The crowd was shouting again. It surged forward, but it lacked a leader, and those in advance shoved backward in fear.

Polter spoke again. "This girl from my world, you will like her. She is kind and very beautiful. When she is large, you will see how beautiful."

A little stone suddenly came up from the throng of little people and struck Polter on the shoulder. Then another. The crowd, emboldened, made a rush; surged against his legs.

He shouted, "You do that? Why how dare you? I show to you what giants do when you make dem angry!"

From down by his knees he plucked the small figure of a man. The crowd scattered with shouts of terror. Polter had the struggling eighteen-inch figure by the wrist. He whirled it around his head like a nine-pin and flung it over the canopy of the dock far out into the shimmering lake!

CHAPTER VII

Within the Golden Cage

THE trees around us expanded to towering forest giants. The underbrush rose up over our heads. We had taken only a taste of the diminishing drug; Glora showed us how to touch it to our tongue several times, to adjust our size as we became smaller. It was no more than a minute of diminishing. We could hear the roar of the crowd, and Polter's voice shouting. We ran forward through the great

V
5
3
M
A
R
3
XUM

forest. It was a fair distance out to the starlit road. We saw it as a wide shining esplanade. The people now were giants twice our height! Polter, himself towering with a seeming fifty foot stature, was standing by the gigantic canopy of the dock. He had dispersed the crowd. There was an open space on the esplanade—a run for us of about a hundred feet.

"We've got to chance it!" I murmured. "Make a run of it—now."

We darted across. In the confusion, with all eyes centered on Polter, we escaped discovery. It was dim under the dock canopy. Polter had backed from the road and was walking to the barge. It lay like the length of an ocean liner, its sail looming an enormous spread above it. The gunwale was level with the dock-floor. A dozen or more fifty-foot men were greeting Polter. They were amidships.

I realize now that in those moments as we scurried aboard like wharf rats, we took wild chances. We made for the stern which momentarily was unoccupied. To Polter and his men we were eight or nine inches tall. We dropped over the gunwale, slid down the convex thirty or forty-foot incline of the interior and landed on the bottom of the boat.

There were many places where we could safely hide. A litter of gigantic rope-strands was around us. We could see the bottom of a cross-bench looming overhead, and the great curving sides of the vessel with the gunwales outlined against the starlight.

THE boat left the dock in a moment; the sail bellied out enormous over us. Ten feet forward from us the towering figure of a man sat on a bench with the steering mechanism before him. Further on, the other men were dispersed, with one or two in the distant bow. Polter reclined on a cushioned couch amidships. Looking along the dark widely level bottom of the boat there were only the feet and legs of the men visible.

Alan whispered, "Let's get closer."

We were insects soundlessly scuttling unnoticed in the dimness. And it was noisy down here—the clank of the steering mechanism; the swish and surge of the water against the hull; the voices of the men.

We passed the boots of the seated helmsmen, and found another hiding place nearer Polter. We could see his giant length plainly. None of the other men were near him. He was reclining on an elbow, stretched at ease on the cushion. And at the moment, he was fumbling with the chains that fastened the little golden cage to his chest. The cage was double its former size to us now. A shaft of pale light came down, reflected from the great sail surface overhead. It struck the bars of the cage. We could see a small figure in there.

Babs!

Then we heard Polter's voice. "I will let you out, Babs. You come out, sit on my hand and talk with me. That will be nice? We haf a little time."

He unfastened the cage and put it on the cushion beside him. He was still propped up on one elbow.

"I let you out, now. Be careful, Babs."

My heart was almost smothering me. "Alan! We've got to get still closer! Try something! Get large, shall we?"

Alan whispered tensely, "I don't know! Oh, I don't know what to do! This thing—"

This thing so strange.

"We can get closer," Glora whispered. "But never larger—not here. They would discover us too soon."

WE crept forward. We reached the edge of the cushion. Its top surface was a trifle lower than our heads—a billowing, wrinkled mass of fabric. But I saw that the folds of it were rough enough to afford a foothold. I thought that I could climb it. We stood erect. There was a deep shadow along here, but it was brighter on the cushion top. We could see over

its edge; an undulating spread of surface with the giant length of Polter stretched there. The cage was nearer to us. Polter's great fingers fumbled with it; a door in the lattice bars flipped open.

"Careful, my Babs!" His voice was a throaty, rumbling roar from above us. "Careful! I do not want you to be hurt."

From the little doorway came the figure of Babs! The starlight glowed on her long blue dress; her black hair was tumbling over her shoulders; her face was pale, but she was unhurt.

Babs! I think that I had never loved her so much as at that moment. Nor ever seen her so beautiful as in that miniature, standing at the door of her golden cage, bravely facing the monstrous misshapen figure of her captor.

We heard her small voice.

"What do you want me to do?"

"Stand quiet. Now I put my hand for you."

His monstrous hand bristled with a thatch of heavy black hair. He brought it carefully sliding along the cushion. Babs was barely the length of one of its finger joints. She climbed upon its palm.

"That iss right, Babs. Now I bring you—hold tight to my finger. Here, I crook the little one. Fling your arms around it."

With a swoop his hand took her aloft and away. Then we saw her, twenty feet or so in the air, still on his hand as he held it near his face.

"Now we haf a little talk, Babs. When we get to the island, I put you back in your cage."

I HAD a sudden flash of realization. Something I could do. I did not plan it. I know now my judgment was bad. I recall it struck me that Alan would want to do it also. And, perhaps, even Glora. That would not work. My chances, however desperate, were better alone. And Glora and Alan—in our present size—could doubtless disembark safely. Glora knew the lay-

out of the island. She could follow Polter.

Alan and Glora were standing beside me, peering over that billowing cushion spread toward the distant giant palm with Babs standing upon it. I gripped Alan's shoulder.

"See here, Alan," I whispered vehemently, "whatever happens, we must follow Polter. Glora knows the way. Some chance will come. What we want is an opportunity to get large without discovery. Then rush Polter!"

Alan's white face turned to me. "Yes, that's what we're planning. But George, here on this boat—"

"Of course. Can't do it here. Tell Glora, be sure and follow Polter. Whatever happens, you think of nothing else: you won't, will you?"

"George, what—"

"We've got to make some opportunity." I was trembling inside, fearful that Alan would be suspicious of me. Yet I had to make sure that he and Glora would stay as close to Polter as possible.

"Yes," Alan agreed. "Listen to them."

Polter was talking to Babs. But I did not hear the words. I moved a trifle away. Rash decision! I hardly decided anything. There was only the vision of Babs before me; my love for her. And my desperate need of doing something; getting to her; seeing her, being with her; having her near my own size again as though the blessed normality of that would rationalize and lessen her danger. If only I had been less rash! If only back there in that tunnel I had stooped to see what it was my foot kicked against!

I SLID away. Alan and Glora did not notice it; they were whispering together and gazing over the cushion at Babs. In the floor shadow I moved some ten feet. On the undulating top of the cushion the little golden cage stood with its lattice door open! It was only a few feet from my face.

I fumbled at my belt for the dimin-

V
5
3
M
A
R
3
1
XUM

ishing vial. I found one pellet left. Well, that would be enough. I was hurried. Alan might discover me. Polter might move; put Babs back in the cage and close its door. We might be near the island already, and the confusion, the activity of disembarking would defeat me. A thousand things might happen.

I touched the pellet to my tongue. In a few seconds the drug action had come and passed. The cushion top loomed well over my head. The side was a ridged, indescribably unnatural vista of cliff-wall. The fabric was coarse with hairy strands, dented into little ravines and crevices. I climbed. I came panting to the pillow surface. The golden cage was six or eight feet away and was now two feet high.

Again I touched the drug to my tongue; held it an instant. The cage drew away; grew to a normal six-foot height; then larger, until in a moment it stopped. I stood peering at it, trying to gauge its size in relation to me. I wanted so intensely now to be normal to Babs. The cage seemed about ten feet high. A little less, possibly. I barley tasted the pellet, and replaced it carefully in the vial. I could only hope its efficacy would be preserved.

I had to chance that I would not be seen now crossing this billowy expanse. I ran. The rope strands of the fabric now had spaces between their curving surfaces. The cage was a shining golden house, set on this wide rolling area. Far in the distance there was a blur—Polter's reclining body.

I reached the cage. It was a room about ten feet square and equally as high. Walled solid, top and bottom, and on three sides. The front was a lattice of bars, with a narrow six-foot-high doorway, standing open now.

I dashed in. The interior was not wholly bare. There was a metal-wrought couch fastened to the wall, with a railing around it and handles. It suggested a ship's bunk. There was a railing at convenient height all around the wall.

I sought a hiding place. I saw just one—under the couch. It was secluded enough. There was a grille-like lattice extending down from the seat to the floor. I squeezed under one end, and lay wedged behind the grille.

HOW much time passed I do not know. My thoughts were racing. Babs would be coming.

I heard the distant approaching rumble of Polter's voice. Through the grille I could see across the floor of the ten-foot cage to the front lattice bars. Outside, there appeared a huge, pink-white, mottled blob—Polter's hand, a ridged and pitted surface with great bristling black stalks of hair.

The figure of Babs came through the cage doorway. Blessed normality! The same slim little Babs who always stood, since we were both matured, with her head about level with my shoulders.

The latticed door swung shut with a reverberating metallic clank. Babs stood tense, clinging to the wall railing. I heard the blurred rumble of Polter's voice.

"Hold tightly, my little Babs!"

The room lurched; went upward and sidewise with a wild dizzying swoop. Babs clung; and I was wedged prone under the couch. Then the movement stopped; there was a jolting, rocking, and outside I heard the clank of metal. Polter was fastening the chains of the cage to his chest.

A white reflected glow now came through the bars. It was starlight reflected from Polter's shirt bosom. An abyss of distance was outside. I could see nothing but the white glow.

Momentarily there was very little movement to the room. Only the rhythmic sway of Polter's breathing and an occasional jolt as he shifted his position. The floor was tilted at a sharp angle. Babs came toward the couch, pulling herself along the wall railing.

I called softly, "Babs! Babs, dear!"

She stopped. I called again, "Babs!"

Don't cry out! It's George! Here—stand still!"

She gave a little cry. "George—where are you? I don't—"

I slid out from my concealment and stood up, holding to the railing.

"Babs, dear."

Blessed normality of size! She cried again, "George! You! George, dear—"

She edged along the railing, a step or two down the tilting floor, then released her hold and flung herself into my waiting arms.

I THINK we are landing. Hold the railing, George. When the room moves it goes with a rush."

Babs laughed softly. It must have seemed to her, after being alone in here, that now our plight was far less desperate. She had told me how she was captured. A man accosted her on the terrace, saying he wanted to speak to her about Alan. Then a weapon threatened her. Amid all those people she was held up in old fashioned style, hurried to a taxicar and whirled away.

She was saying now, "When Polter moves, it is dizzying. You'll see."

"I have already, Babs. Heavens, that swoop!"

The room was more level now. We carefully drew ourselves to the front lattice. Polter was standing, and we had the white sheen from his shirt-front. A sheer drop was outside the bars, but looking down I could see the outlines of his body with the huge spread of the boat interior underneath us.

A confusion of rumbling voices sounded. Blurred giant shapes were outside. The room jolted and swayed as the boat landed and Polter disembarked.

Babs stood clinging to me. Blessed normality of size! We, at least, were normal—this metal barred room, Babs and I. But outside was the abnormality of largeness. I think that in relation to us, the men were of over two hundred foot stature, and the hunched Polter a trifle less. It seemed as he walked

that we were lurching at least a hundred and fifty feet above the ground.

"You had better hide," Babs urged. "He might stop and speak to someone. If anyone peered in here you would be seen: no chance then, even to get across the room."

IT was true. But for a few moments I lingered, though I could distinguish vegetation on their flat roof-tops, as though flower-gardens were laid there.

We passed a house with its hundred-foot oval windows all aglow with light. Music floated out—a distant blare of musical sounds, and the ribald laughter of giant voices. I had seen no women among these giants of the islands. But now a huge face was at one of the ovals. A dissolute, painted woman of Earth, staring out at Polter as he passed. It was like the enormous close-up image on a large motion picture screen. She shouted a ribald jest as he went by.

"George, please go back. Suppose she had seen you?"

We were ascending a hill. A distance ahead a great oblong building loomed like a giant's palace, which indeed it was. We headed for it, passed through a vast arching doorway into the greater dimness of an echoing interior. I scurried back across the lurching room and again wedged myself under the couch. Babs stood at the lattice ten feet away. We dared to talk in low tones; the rumbling voices and footsteps outside would make our tiny voices inaudible to Polter.

I was tense with my plans. I had told them to Babs. With the one partially used remaining pellet of the diminishing drug we could make ourselves small enough to walk out through the bars. Then my black vial of the enlarging chemicals, as yet unused, would take us up, out to our own world. We could not use the drugs now. But the chance might come when Polter would set the cage on the

V
5
3
M
A
R
3
1
XUM

ground, or somewhere so that we might climb down from it, with a chance to hide and get large before we were discovered. I would fight our way upward; all I needed was a fair start in size.

BUT I lay now with doubts assail-
ing me. This was the first mom-
ent I had had for calm thoughts,
though in truth they were far from
calm! Where were Alan and Glora?
Following us now? I could only hope
so. Once out of this, Babs and I would
have to rejoin them. But how? A
panic swept me. I should not have left
them. Or at least I should have told
them what I was trying, and given Alan
a chance to plan.

The panic grew upon me, the pre-
monition of disaster. From my belt I
took the opalescent vial with its one
partly used pellet. I dumped the pel-
let out. It was spoiling! The former
exposure of the air, the moisture of
my tongue, had ruined it! I had no
need to guess at the catastrophe; as I
held its crumbling, deliquescent frag-
ments on my palm it melted into vapor
and was gone!

We could not make ourselves smaller! We would have to wait now until
Polter opened the cage. But once out-
side, the enlarging drug would give us
our chance to fight our way upward.
My trembling fingers sought the black
vial in my belt. It was not there! My
mind flung back: in that tunnel, some-
thing had dropped and I had kicked it!
Accursed chance! My accursed, heed-
less stupidity!

I had lost the black vial! We were
helpless! Caged! Marooned here in
a size microscopic!

CHAPTER VIII

From a Drop of Water

ILAY concealed, and Babs stood at
the lattice of our cage room. I was
aware that Polter had entered some
vast apartment of this giant palace. A
brighter light was outside; I heard

voices—Polter's and another man's. I
could see the distant monster shape of
one. He was at first so far away that
all his outline was visible. A seated
man, in a huge white room. I thought
there were great shelves with enormous
bottles. The spread of table tops
passed under our cage as Polter walked
by them. They held a litter of appa-
ratus, and there was the smell of chemi-
cals in the air. It seemed that this was
a laboratory.

The man stood up to greet Polter.
I had a glimpse of his head and shoul-
ders level with us. He wore a white
linen coat, open, soft collar and black
tie. He seemed an old man, queerly
old, with snow-white hair.

I had an instant of whirling, con-
fused impressions. Something was fa-
miliar about his face. It was seamed
and wrinkled with lines of age and
care. There were gentle blue eyes.

Then all I could see was the vast
spread of his white shirt and coat, a
black splotch of his tie outside our
bars as Polter faced him.

Babs gave a low cry. "Why—why—
dear God—"

And then I knew! And Polter's
words were not needed, though I heard
their rumble.

"I am back again, Kent. Are you still
rebellious? You haf still determined
to compound no more of our drugs?
You would rather I killed you? Then
see what I haf here. This little cage,
someone—"

It was Dr. Kent, a prisoner here all
these years!

Babs turned her white face toward
me. "George, it's father! He's alive!
Here!"

"Quiet, Babs! Don't let them know
I'm here. Remember!"

The old man recognized her. "Babs!"
It was an agonized cry. The blur of
him was gone as he sank down into his
chair.

Polter continued standing. I could
envise his sardonic grin. Babs was
calling:

"Father, dear! Father!"

FROM over us came Polter's rumble. "She iss glad to see you, Kent. I haf her here, safe. You always knew I would nefer be satisfied until I had my little Babs? Well, now I haf her. Can you hear me?"

A sudden desperate calmness fell on Babs. She called evenly, "Yes, I hear you. Father, do not anger him. Do not rebel; do what he commands. Dr. Polter, will you let me be with my father? After all these years, let me be with him, just for a little while. In his size—normal."

"Hah! My Babs iss scheming."

"No! I want to talk to him, after so long. These years when I thought he was dead."

"Scheming. You think, my little Babs, that he has the drugs? I am not so much a fool. He makes them. He can do that, and the last secret reactions only he can perform. He iss stubborn. Never would he tell me that one reaction. But he makes no drugs complete, only when I am here."

"No, Dr. Polter! I want only to be with him."

The old man's broken voice floated up to us. "You will not harm her, Polter?"

"No. Fear nothing. But you no longer rebel?"

"I will do what you tell me." The tones carried hopeless resignation, years of being beaten down, rebelling—but now this last blow vanquished him. Then he spoke again, with a sudden strange fire.

"Even for the life of my daughter, I will not make your drugs, Polter, if you mean to harm our Earth."

The golden cage room swooped as Polter sat down. "Hah! Now we bargain. What do you care what I do to your world? You never will see it again. I can lie to you. My plans—"

"I do care."

"Well, I will tell you, Kent. I am good natured now. Why should I not be, with my dear little Babs? I tell you. I am done with the Earth world. It iss so much nicer here. My friends,

they haf a good time always. We like this little atom realm. I am going out once more. I must hide the little piece of golden quartz so no harm will come to it."

POLTER was evidently in a high good humor. His voice fell to an intimate tone of comradeship; but still I could not mistake the irony of it.

"You listen to me, Kent. There was a time, years ago, when we were good friends. You liked your young assistant, the hunchback Polter. Iss it not so? Then why should we quarrel now? I am gifing up the Earth world. I wanted of it only the little Babs. . . . You look at me so strange! You do not speak."

"There is nothing to say," retorted Dr. Kent wearily.

"Then you listen. I haf much gold above, in Quebec. You know that. So very simple to take it out of our atom, grow large with it, to what we call up there the size of a hundred feet. I haf a place, a room, secluded from prying eyes under a dome-roof. I become very tall, holding a piece of gold. It is large when I am a hundred feet tall. So I haf collected much gold. They think I own a mine. I haf a smelter and my gold quartz I make into ingots, refined to the standard purity. So simple, and I am a rich man."

"But gold does not bring happiness, my friend Kent." He chuckled ironically at his use of the platitude. "There is more in life than the ownership of gold. You ask my plans. I haf Babs, now. I am gifing up our Earth world. The mysterious man they know as Frank Rascor will vanish. I will hide our little fragment of quartz. No one up there will even try to find it. Then I come down here, with Babs, and we will haf so nice a little government and rule this world. No more of the drugs then will be needed, Kent. When you die, let the secret die with you."

Again Polter's voice turned ingratiating, even more so than before. "We will be friends, Kent. Our little Babs

will lof me; why should she not? You will tell her—advise her—and we will all three be very happy."

Dr. Kent said abruptly, "Then leave her with me now. That was her request, a moment ago. If you expect to treat her kindly, then why not—"

"I do! I do! But not now. I cannot spare her now. I am very busy, but I must take her with me."

BABS had been silent, clinging to the bars of our cage. She called: "Why? I ask you to put this cage down."

"Not now, little bird."

"And let me be with my father."

It struck a pang through me. Babs was scheming, but not the way Polter thought. She wanted the cage put on the floor, herself out, and a chance for me to escape. I had not yet told her of my miserable stupidity in losing the vial.

Polter was repeating, "No, little bird. Presently; not now. I may take you out with me, my last trip out. I want to talk with you in a normal size when I haf time."

Our room swooped as he stood up. "You think over what I haf said, Kent. You get ready now to make the fresh drugs I will need to bring down all my men from the outer world. They will all be glad to come, or, if not—well, we can easily kill those who refuse. You make the drugs. I need plenty. Will you?"

"Yes."

"That iss good. I come back soon and gif you the catalyst for that last reaction. Will you be ready?"

"Yes."

The blur outside our bars swung with a dizzying whirl as Polter turned and left the room, locking its door after him with a reverberating clank.

LEFT alone in his laboratory, Dr. Kent began his preparations for making a fresh supply of the drugs. This room, with two smaller ones adjoining, was at once his workshop and

his prison. He stood at his shelves, selecting the basic chemicals. He could not complete the final compounds. The catalyst which was necessary to the final reaction would be brought to him by Polter.

How long he worked there with his thoughts in a whirl at seeing Babs, he did not know. His movements were automatic; he had done all this so many times before. His mind was confused, and he was trembling from head to foot, an old, queerly, unnaturally old man now—unnerved. His shaking fingers could hardly hold the test tubes.

His thoughts were flying. Babs was here, come down from the world above. It was disaster—the thing he had feared all these years.

He suddenly heard a voice.

"Father!"

And again: "Father!" A tiny voice, down by his shoe-tops. Two small figures were there on the floor beside him. They were both panting, winded by running. They were enlarging; they had come from a smaller size.

It was Alan and Glora, who had followed Polter from the boat, diminished again, and come running through the tiny crack under the metal door of the laboratory.

They grew to a foot in size, down by Dr. Kent's legs. He was too unnerved; he sat in a chair while Alan swiftly told him what had happened. Babs was in the golden cage. Dr. Kent knew that; but none of them knew what had happened to me.

"We must make you small, Father. We have the drugs, here with us."

"Yes! Yes, Alan. How much have you? Show me. Oh, my boy, that you are here—and Babs—"

"Don't you worry, we'll get away from him."

GLORA and Alan had almost reached Dr. Kent's size before their excited fingers could get out the vials. They took some of the diminishing drug to check their growth. Alan handed his father a black vial.

"Yes, lad—"

"No! Wait, Father! That's the wrong drug. This other—"

Dr. Kent had opened the vial. His trembling hand spilled some of the pellets, but none of them noticed it.

"Father, dear, this one." Alan held an opalescent vial. "This one."

Gloria said abruptly, "Listen! Is that someone coming?"

They thought they heard approaching footsteps. A moment passed, but no one came into the room.

"Hurry," urged Gloria. "It is nothing. We wait too long."

"My boy—Alan, dear, after all these years—"

They were about to take the diminishing drug. From across the room there came a very queer sound. A scuttling, scratching, and the drone of wings.

"Father, good God—look!"

Over by the wall, a giant fly was running across the floor. It was growing larger!

At Dr. Kent's feet the pellets he had dropped were crushed by his footsteps and strewn on the floor. A fly had eaten of the sweetish powder.

The enlarging drug was loose!

A few drops of water lay mingled with the drug on the floor. And from the water nameless hideous things were rising!

CHAPTER IX

The Doomed Realm

TO Alan the first few moments that followed the escape of the drug were the most horrible of his life. The discovery struck old Dr. Kent, Gloria and Alan into a numb, blank confusion. They stood transfixed, staring with cold terror. The fly was scurrying along the floor close against the wall. Already it was as large as Alan's hand. It ran into the corner, hit the wall in its confused alarm, and turned back. Its wings were droning with an audible hum. It reared itself on its hairy legs, lifted and sailed across the room.

As though drawn by a magnet Alan turned to watch it. It landed on the wall. Alan was aware of Dr. Kent rushing with trembling steps to a shelf where bottles stood. Gloria was stricken into immobility, the blood draining from her face.

The fly flew again. It passed directly over Alan. Its body, with a membrane sac of eggs, was now as large as his head; its wide-spread transparent wings were beating with a reverberating drone.

Alan flung a bottle which was on the table beside him. It missed, crashed against the ceiling, came down with splintering glass and spilling liquid. Fumes spread chokingly over the room.

The fly landed again on the floor. Larger now! Expanding with a horribly rapid growth. Gloria flung something—a little wooden rack with a few empty test-tubes in it. The rack struck the monstrous fly, but did not hurt it. The fly stood with hairy legs braced under its bulging body. Its multiple-lensed eyes were staring at the humans. And with its size must have come a sense of power, for it seemed to Alan that the monstrous insect had an abnormal alertness as it stood measuring its adversaries, gathering itself to attack them.

Only a few seconds had passed. Confused thoughts swept Alan. This fly with its growth would soon fill this room. Burst it; burst upward through a wrecked palace; soar out, and by the power of its size alone, devastate this world.

He heard himself shouting, "Father, get back! It's too large! I've got to kill it!"

LAUNCH himself upon it? Wrestle with it in a hand to hand combat? Alan edged around the center table. He was bathed in cold sweat. This thing so horrible! It was too large! Half the length of his own body, now. In a moment it might be twice that! He was aware of Gloria pulling at him; and his father rushing

V
5
3
M
A
R
3
XUM

past him with a bottle of liquid, and shouting:

"Alan! Run! You and this girl, get out of here! The other room—"

Then Alan saw the things upon the floor! His foot crushed one with a slippery squash! Nameless, hideous, noisome things grown monstrous, risen from their lurking invisibility in the drops of water! Sodden, gray-black and green-slimed monsters of the deep; palpitating masses of pulp! One lay rocking, already as large as a football with streamers of ooze hanging upon it, and a black-ink fluid squirting; others were rods of red jelly-pulp, already as large as lead pencils, quivering, twitching. Germs of disease, these ghastly things, enlarging from the invisibility of a drop of water!

The fly landed with a thud on the center table. The fumes of the shattered bottle of chemicals were choking Alan. He flung himself toward the monster fly, but Glora held him.

"No! Escape! The other room!"

Dr. Kent was stamping the things upon the floor; pouring acids upon them. Some eluded him. The air in the room was unbreathable. . . .

They reached the bedroom. The laboratory was a hideous chaos. They were aware of its outer door opening, disclosing the figure of Polter who, undoubtedly, had been attracted by the noise. He shouted a startled oath. Alan heard it above the beating wings of the monster fly. Things lurched at the opened door; Polter banged it upon them and rushed away, shouting the alarm through the palace.

Dr. Kent was stammering, "Not the enlarging drug! Glora, child, the other! Hurry!"

Alan helped Glora with the opalescent vial. Things were lurching toward this room from the laboratory. Alan with averted face, choked by the incoming fumes, slammed the door upon the gruesome turmoil.

They took the diminishing drug. The bedroom expanded. The hideous sounds from the laboratory, and the

whole palace now ringing with a wild alarm, then faded into the blessed remoteness of distance above them. . . .

"I THINK it is this way, Alan. Off there—a doorway from my bedroom. Polter always kept it locked, but it leads into a corridor. We must get out of here. A crack under the door—is that it, off there?" Dr. Kent pointed into the gloomy blur of distance. "We are horribly small—it's so far to run—and I've lost my sense of direction."

The drug had ceased its action. The wooden floor of the room had expanded to a spread of cellular surface, ridged with broken, tube-like tunnels; pits and jagged cave-mouths. A knot-hole yawned like a crater a hundred feet away.

"We are too small," Glora protested hurriedly. "The door is where you say, Dr. Kent, but miles away."

With the other drug, the room contracted. The floor surface shrank and smoothed a little. The door was distinguishable—a square panel several hundred feet in width and towering into the upper haze. The black line of the crack was visible along its bottom.

They ran to it. The top of the crack was ten feet above their heads. They ran under, across the wide intervening darkness toward a glow of light. Then they came from under the door into a corridor—and shrank against a cliff-wall as with a rush of wind and pounding tread the blurred shapes of a man's huge feet and legs rushed passed. The upper air was filled with rumbling shouts.

"We must chance it!" exclaimed Dr. Kent. "Too dangerous, so small! Larger—and if they see us, fight our way out!"

In the turmoil of the doomed palace no one noticed them. They cast aside all restraint. It was too dangerous to wait. The excessive dose they took of the drug made the corridor shrink with dizzying speed. They rushed along its length. Alan hurled a little man aside

who was in their path. Already they were larger than the Polter people.

THEY squeezed out of a shrinking doorway. The dwindling island was a turmoil. Little figures were plunging from the palace. At the edge of the water, Alan, Glora and Dr. Kent stood for an instant looking behind them. The palace was rocking! Its roof heaved upward then smashed and fell aside with the clatter of tumbling masonry. The monstrous fly, its hideous face mashed and oozing, reared itself up and, with broken, torn wings tried to soar away. But it could not. It slipped back. The drone and buzz of its flight sounded over the chaos of noise. Other things came lurching and twitching upward; slithering out. . . .

The expanding body of the fly was pushing the palace walls outward. In a moment they collapsed and it emerged. . . .

To Alan and his companions the scene was all shrinking into a miniature chaos of horror at their shoetops. A diminuendo of screams mingled down there. Overhead were the stars, shining peacefully remote. Nearby lay a rapidly narrowing channel of shining water. A tiny city was across it. Lights were moving. The panic had spread from the island to Orena. Beyond the tiny city, a range of mountains showed; a cliff, gleaming in the starlight; tunnel mouths.

Suddenly against the stars off there, Alan saw the enlarging figure of Polter, his hunched shape unmistakable. He was facing the other way. He lunged and scrambled into a yawning black hole in the mountains. Polter was escaping! None of these people except himself had the drugs. He was escaping with the golden cage, out of this doomed atomic world to our Earth above.

Gloria murmured, "There is our way out. Your way. And that is Polter going. I think he did not see us. So much is growing gigantic here." She clung to Alan. "Dear one—"

Dr. Kent muttered, "We will wait a moment—wade across—or leap over, and follow him out. Babs with him—dear God I hope so! This doomed realm!"

ALAN held Glora close. And suddenly he was laughing—a madness, half hysteria. "Why, this, all this—why look, Glora, it's funny! This little world all excited, an ant-hill, outraged! Look! There's our giant sailboat!"

Down near their feet the inch-long sailboat stood at its dock. Tiny human figures were rushing for it; others, floundering in the water, were trying to climb upon it. Dr. Kent had stepped from the shore a foot or two, and tiny, lashing white rollers rocked the boat, almost engulfing it.

Alan's laugh rang out, "God! It's funny, isn't it? All those little creatures, so excited!"

"Steady, lad!" Dr. Kent touched him. "Don't let yourself laugh! A moment now, then we'll wade across. Polter won't have much start on us. We musn't get too close to him in size, but try and attack him unawares. We have got to get Babs away from him."

The narrowing passage rose hardly to their knees. They stepped ashore, well to one side of the toy city. Their growth had almost stopped. But suddenly Alan realized that Glora was diminishing! She had taken the other drug.

"Gloria!"

"I must go back, Alan. This is my world, doomed perhaps, but I cannot forsake it now. I must give the enlarging drug to my father. And others who can rise and fight these monsters."

"Gloria!"

Dr. Kent said hurriedly, "She's right, Alan. There is a chance they can save their city. For her to leave them would be dastardly."

She cried, "You go on up, Alan. You have enough of the drugs. Leave me, dear one—I am going back!"

"No!" he protested. "You must not!"

Or if you do, I'll come with you!"

She clung to him. He felt her body diminishing within his encircling arms. His love for her swept him—this girl who had cajoled Polter, or tricked him, stolen several of the little vials from him heaven knows how, and followed him up to the other world. This girl whom Alan now knew he loved, was leaving him. Forever?

AS he stood there, with the miniature landscape at his feet in the wan starlight, the panic-stricken tiny city, the island with its monsters rising to overwhelm this microscopic world—it seemed to Alan then that if he let her go it was the end for him of all life's promised happiness.

"Alan, lad, come." His father was pulling at him. So horrible a choice! Alan thought that I was back on that island. But Babs, a prisoner in the golden cage, was with Polter, plunging upward in size. And his father was beside him, pleading.

"Alan—come—I can't get out alone. Nor save Babs. And the maddened Polter, with the power of this drug, can conquer and enslave our Earth as he has enslaved Orena—just one little city of one tiny golden atom! Believe me, lad, your duty lies above."

Gloria's head was now down at Alan's waist. He stopped and kissed her white forehead; his fingers, just for an instant, smoothed her glossy hair.

"Good-by, Glora."

"Dear one, good-by."

She plunged away, and her tread as she dwindled mashed the forest behind the city. Alan and his father ran for the cliff. They were too large to squeeze into the little hole. But in a moment they made themselves smaller. They climbed as they dwindled; checked the drug action and rushed into the tunnel-mouth.

Alan stopped just for an instant to gaze out over the starlit scene. It was almost the same viewpoint from which he had his first sight of Glora's world only an hour or two before. The dis-

tant island beyond the city showed plainly with the shining water around it. The vegetation there was growing! And there were dark, horribly formless blobs lurching outward and rising with monstrous bulk against the background of the stars!

"Alan! Come, lad!"

With a prayer for Glora trembling on his lips, Alan plunged into the dim phosphorescent gloom of the tunnel.

CHAPTER X

The Escape

TO Babs and me the ride in the golden cage strapped to Polter's chest as he made his escape outward into largeness was an experience awesome and frightening almost beyond conception. We heard the alarm in the palace on the island. Polter rushed to Dr. Kent's laboratory door, looked in, and in a moment banged it shut. Babs and I saw very little. We knew only that something horrible had happened; we could see only a blur with formless things in the void beneath our bars; and there were the choking fumes of chemicals surging at us.

Polter rushed through the castle corridor. We heard rumbling distant shouts.

"The drug is loose! The drug is loose! Monsters! Death for everyone!"

The room swayed with horrible dizzying lurches as Polter ran. We clung to the lattice bars, our legs and arms entwined. There were moments when Polter leaped, or suddenly stooped, and our reeling senses all but faded.

"Babs! Babs, darling, don't let go! Don't lose consciousness!"

If she should be limp, here in this lurching room, her body to be flung back and forth across its confines—that would be death in a moment. I feared I could not hold her. I managed to get an arm about her waist.

"Babs!"

"I'm—all right, George. I can stand it. We're—he is enlarging."

"Yes."

I saw water far beneath us, lashed into a turmoil of foam with Polter's wading steps. There was a brief swaying vista of a toy city; starlight overhead; a lurching swaying miniature of landscape as Polter ran for the towering cliffs. Then he climbed and scrambled into the tunnel-mouth. Had he turned at that instant doubtless he would have seen the rising distant figures of Glora, Alan and Dr. Kent. But he did not see them, evidently. Nor did we.

Polter spoke only very occasionally to Babs. "Hold tightly!" It was a rumbling voice from above us. He made no move to touch the cage, except that a few times the great blur of his hand came up to adjust its angle.

THE lurching and jolting was less violent in the tunnel. Polter's frenzy to escape was subsiding into calmness. He traversed the tunnel with a methodical swinging stride. We were aware of him climbing over the noisome litter of the dead giant's body which blocked the tunnel's further end. We heard his astonished exclamations. But evidently he did not suspect what had happened, thinking only that the stupid messenger had miscalculated his growth and been crushed.

We emerged into a less dim area. Polter did not stop at the fallen giant. Nothing mattered now to him, quite evidently, save his own rapid exit with Babs from this atomic realm. His movements seemed calm, yet hurried.

We realized now how different was an outward journey from the trip coming in. This was all only an inch of golden quartz! The stages upward were frequently only a matter of growth in size; the distances in this vast desert realm of golden rock always were shrinking. Polter many times stood almost motionless until the closing dwindling walls made him scramble upward into the greater space above.

It may have been an hour, or less.

Babs and I, from our smaller viewpoint, with the landscape so frequently blurred by distance and Polter's movements, seldom recognized where we were. But I realized that going out was far easier in every way than coming in. Easier to determine the route, since usually the diminishing caverns and gullies made the upward step obvious. . . . We knew when Polter scrambled up the incline ramp.

It seemed impossible for us to plan anything. Would Polter make the entire trip without a stop? It seemed so. We had no drugs. Our cage was barred beyond possibility of our getting out. But even if we had had the drugs, or had our door been open, there was no escape. An abyss of distance was always yawning beyond our lattice—the sheer precipice of Polter's body from his chest to the ground.

"Babs, we must make him stop. If he sits down to rest, you might get him to take you out. I must reach his drugs."

"Yes. I'll try it, George."

POLTER was momentarily standing motionless as though gazing around him, judging what to do next. His size seemed stationary. Beyond our bars we could see the distant circular walls as though this were some giant crater-pit in which Polter was standing. Then I thought I recognized it—the round, nearly vertical pit into which Alan had plunged his hand and arm. Above us then was a gully, blind at one end. And above that, the outer surface, the summit of the fragment of golden quartz.

"Babs! I know where we are! If he takes you out, keep his attention. I'll try and get one of his black vials. Make him hold you near the ground. If I see you there, in position where you can jump, I'll startle him. Oh, Babs, dear, it's desperately dangerous but I can't think of anything else. Jump! Get away from. I'll keep his attention on me. Then I'll join you if I can—with the drug."

V
5
3
M
A
R
3
1
XUM

Polter was moving. We had no time to say more.

"Yes! Yes, I'll try it, George." For just an instant she clung to me with her soft arms about my neck. Our love was sweeping us in this desperate moment, and it seemed that above us was a remote Earth world holding the promise of all our dreams. Or were we star-crossed, doomed like the realm of the atom? Was this swift embrace now marking the end of everything for us?

Babs called, "Dr. Polter?"

We could feel his movements stopping.

"Yes? You are all right, Babs?"

She laughed—a ripple of silvery laughter—but there was tragic fear in her eyes as she held her gaze on me. "Yes, Dr. Polter, but breathless. Almost dead, but not quite. What happened? I want to come out and talk to you."

"Not now, little bird."

"But I want to." To me it was a miracle that she could call so lightly and hold that note of lugubrious laughter in her voice. "I am hungry. Don't you think of that? And frightened. Take me out."

HE was sitting down! "You remind me that I am tired, Babs. And hungry, also. I have a little food. You shall come out for just a short time."

"Thank you. Take me carefully."

Our tilted cage was near the ground as he seated himself. But still it was too far for me to jump.

I murmured, "Babs—"

"Wait, George! I'll fix that. You hide! If he looks in he'll see you, where you are now!"

I scrambled back to my hiding place. Polter's huge fingers were fumbling at our bars. The little door sprang open.

"Come, Babs."

He held the cupped bowl of his palm to the doorway. "Come out."

"No!" she called. "It is too far down!"

"Come. That is foolish."

"No! I'm afraid. Put the cage on the ground."

"Babs!" His finger and thumb came reaching in to seize her, but she avoided them.

"Dr. Polter! Don't! You'll crush me!"

"Then come out on my hand."

He seemed annoyed. I had scrambled back to the doorway; I knew he could not see me so long as the cage remained strapped to his shirt front.

I whispered, "I can make it, Babs!"

Polter was apparently on one elbow, half turned on his side. From our cage, the sloping gleaming white surface of his stiff glossy shirt-bosom went down a steep incline. His belt was down there, and the outward bulging curve of his lap—a spreading surface where I could land like a scuttling insect, unobserved, if only Babs could hold his attention.

I whispered vehemently, "Try it! Go out! Leave me! Keep talking to him!"

She called instantly, "Very well, then. Bring your hand! Closer! Carefully! It seems so high up here!"

SHE swung herself to his palm, and flung her arms about the great pillar of his upcrooked finger. The bowl of his hand moved slowly away. I heard her calling voice, and his overhead rumble.

I chanced it! I could not determine the exact position, or which way he was looking.

Again I heard Bab's voice. "Careful, Dr. Polter. Don't let me fall!"

"Yes, little bird."

I let myself down from the tilted doorway, hung by my hands and dropped. I struck the ramp-like yielding surface of his shirt-bosom. I slid, tumbling, scrambling, and landed softly in the huge folds of his trouser fabric. I was unhurt. The width of his belt, high as my body, was near me. I shrank against it: I found I could cling to its upper edge.

My hold came just in time. He shifted, and sat up. I was lifted with a swoop of movement. When it steadied I saw above me the top of his knee. His left leg was crooked, the foot drawn close to him. Babs was perched up there on the knee summit. His right leg was outstretched. I was at the right side of his belt. I could dart off along that curving expanse of his leg and leap to the ground. If he would hold this position! One of the pouches of his belt was near me. The vial in it was black. The enlarging drug! I moved toward it.

But Babs was too high to jump from that summit of his crooked knee! I think she saw me at his belt. I heard her voice.

"I cannot eat up here. It is too high. Oh, please be careful how you move! I am so dizzy, so frightened! You move with such great jerks!"

He had what seemed a huge surface of bread and meat. He was breaking off crumbs to put before her. I reached the pouch of his belt. The vial was as long as my body. I tugged to try and lift it out.

ALL the giant contours of Polter's body shifted as he cautiously moved. I clung. I saw that Babs was being held gently between his thumb and forefinger. He lowered her to the ground, and she stood beside the bread and meat he had placed there.

And she had the courage to laugh! "Why this—this is an enormous sandwich! You will have to break it."

He was leaning over her, half turned on his left side. The vial came free. I shoved it; but I could not control its weight. I pushed desperately. It slid over the round brink of his right hip, and fell behind him. I heard the tinkling thud of it down on the rocks.

There was no alarm. I could not chance leaping from his hip. I scurried along the convex top of his outstretched leg, and beyond his knee I jumped.

I landed safely. I could see the black

Ast. St.

vial back across the broken rock surface, with the bulge of Polter's hip above it. I ran back and reached the vial; tugged at its huge stopper. The cork began to yield under my panting, desperate efforts. In a moment I would have a pellet of the enlarging drug; make away with it; startle Polter so that Babs might dart off and escape.

The huge stopper of the vial was larger than my head. It came suddenly out. I flung it away, plunged in my hand, and seized an enormous round pellet.

Then abruptly the alarm came, and I had not caused it! Polter ripped out a startled, rumbling curse and sat upright. Under the curve of his leg, I saw that Babs had been momentarily neglected. She was running.

Across the boulder-strewn plain, two tiny men had appeared. Polter had seen them.

They were the enlarging figures of Dr. Kent and Alan!

CHAPTER XI

The Combat of Size

THE astounded Polter was taken wholly by surprise. He could have had no idea that anyone was following him. He thought he was alone with the tiny Babs in this rock-strewn metal desert. What he saw as he scrambled to his feet were four insect-size humans, two of them at a distance, and two within reach of him, and all of them scampering in different directions. The ground was littered with crags and boulders; was ridged and pitted, pock-marked, with tiny crater-holes and caves. The four scuttling figures almost instantly had disappeared from his sight.

I did not see where Babs went. I turned from the black vial of Polter's enlarging drug, and with the huge pellet under my arm I ran leaping over the rough ground and flung myself into a gully. I lay prone, flattened against a rock. In the murky distance of a pseudo-sky overhead, the mon-

V
5
3
M
A
R
XU

strous head and shoulders of Polter were visible. I could see down to just below his waist. The empty cage with its door flapping open hung against his shirt-front. He had stooped to try and recover Babs. And instinctively his hands went to his belt to seize his enlarging drug.

They were fumbling there now. He hauled out an opalescent vial of the diminishing element. But his black vial was gone. His frown spread into fear as he searched for it in the other compartments of his belt. I had thought that he had more than one black vial, but now it seemed not. His huge face was swept with the panic of terror. He flung a wild glance around him.

Through the open end of my gully I saw in the distance, miles away, the enlarging figure of Alan rising up. Then it ducked back of a distant rocky peak. Polter undoubtedly saw it. He was fumbling with his opalescent vial, and with confused panic upon him he made the mistake of taking the diminishing drug. And instantly seemed to regret it. His curse rumbled above me. His glance went down to the rocks at his feet, and there he saw lying his black vial with its stopper out. His body already was beginning to dwindle. He stooped, seized the vial, and took the enlarging drug. The shock of it made him stagger; momentarily he disappeared from my line of vision but I could hear his panting breath and the unsteady pound of his footsteps.

I STILL held that huge round ball of the drug. I seized a loose stone and frantically knocked off a chunk—heaven knows how much, I do not. I shoved it into my mouth, chewed and hastily swallow it. And with the lurching, swaying, shrinking gully closing in upon me, I ran to get out of its distant open end.

I was heading toward where Alan and his father were lurking. I came from the gully into the open, just as

the walls closed behind me. The whole scene was a dizzying blurred sway of contracting movement. I saw that I was in a circular valley now some five miles in diameter, with its jagged enclosing walls rising sheerly perpendicular out of sight in the haze overhead.

Polter had staggered backward. I saw him a mile or so away. His back at that instant was turned to me. He was now no more than three or four times my own height. He scrambled against the valley cliff-wall as though trying to find a foothold to climb up it. He went a little way, but fell back.

Near me, Alan and old Dr. Kent suddenly appeared. I was larger. They flung themselves at my knees. Alan gasped:

"You, George! You got Babs?"

"Yes—Babs is around somewhere! Stay down here! Don't lose her in size! Stay small! Search and—"

"But George—"

"I'll tackle Polter. I've taken—God, I don't know how much I've taken of the drug!"

They were shrinking down by my boot-tops. Alan shouted suddenly, "There's Babs! Thank God, there's Babs!"

She was too small; I could not see her, nor even hear her, though she must have been calling to them. Alan again screamed up at me with his little voice:

"She's here, George! You—go on and get Polter! I can't overtake you—you—haven't enough of the drug!" His tiny voice was fading away. "Go on get him, George! This time—get him—"

I SWUNG with a staggering step around to face the open valley. It was shrunken now to barely half a mile of width. Its smooth walls rose some two or three thousand feet to an upper circular horizon with murky distance overhead. Polter stood across from me. He had tried to climb out but could not. He saw me and came lurch-

ing. We were a quarter of a mile from each other. I ran forward through a shifting scene of shrinking rock walls and crawling, contracting ground. Quarter of a mile? It seemed hardly more than a score of running strides before Polter loomed close ahead of me. He was still nearly twice my size. I stooped, seized a loose boulder, and flung it. I missed his face, but, as his hand went up carrying a bared knife-blade, by fortunate chance the stone struck his wrist. The knife dropped to the rocks. He stooped to recover it, but I was upon him. As I felt his huge arms go around me, half lifting me, my foot struck the knife. But in an instant it was swept down into smallness beneath us as we expanded above it.

Both of us were unarmed in this combat of size. I was a half-grown youth in Polter's first grip upon me. I heard his panting words, grimly triumphant:

"This—George Randolph, I have been—waiting for so many many years! The hunchback—takes his revenge—now—"

He lifted me. His great arms were horribly powerful, but I could feel them dwindling. I was enlarging faster. Just a few moments—if I could last a few moments! . . . My feet were off the ground, my chest close pressed against the little golden cage between us. He had a hand shoving back my head; his fingers sought my throat. I wound my legs around him, and then he tried to throw me down and fall upon me. But we had twisted and my back was to the cliff. The rocks were shoving at us, insistently pushing with almost a living movement. Polter staggered with me. His grip on my throat tightened, shutting off my breath. My senses whirled. His grim sardonic face over me was blurred to my sight. I tore futilely at my throat to break his choking grip. All the world was a roaring chaos to my fading senses. Then in the blur I saw horror sweep his expression. His fingers involuntarily loosened. I got a

breath of blessed air, gasping, and my sight cleared.

Walls were closing around us! We were in a pit barely ten feet wide, with the top a few feet above Polter's head. The nearer wall shoved us again. Our bodies almost filled the shrinking pit! Polter lurched and cast me off. I half fell, striking my shoulder against the opposite wall, and I saw Polter leap at the dwindling brink and scramble out.

I was nearly wedged. As I rose, the top of the pit only reached my waist. Polter had fallen on the upper ground, and was on hands and knees. Instead of standing up, he lurched at me; tried to shove me back. But I was out. I clutched at him. We were almost of a size now. We rolled on the ground, locked together; rolled to the brink of the pit and over it, as it shrank to a little round hole unnoticed beneath our threshing bodies!

AT the side of the circular valley Alan and Dr. Kent crouched with the smaller figure of Babs between them. They saw Polter and me as two swaying gigantic forms locked in a death struggle, towering against the sky. Tremendous expanded bodies! They saw us come to grips; saw the great hunched Polter bend me backward, choking me.

Our bodies lurched. Our huge legs with a single step brought us to the center of the valley. It was a shrinking valley to Alan, Babs and Dr. Kent, for they too, were enlarging. But the fighting giant figures were growing faster. In only a moment their shoulders were up there in the sky, pressing against the narrowing cliff-walls.

Alan gasped, "But George will be crushed! Look at him!"

Horror swept them as they crouched watching. The enormous pillars of Polter's legs towered straight up from near at hand. Alan was aware of himself screaming:

"George—out! You're too large! Too large for in here!"

V
5
3
M
A
R
XU

As though his microscopic voice could reach me—my head hundred of feet above him. But he screamed it again. This was all in a few horrible moments, though it seemed to the three watchers an eternity. Alan was helpless to aid me; they had taken all of the enlarging drug they had.

Then they saw Polter cast me off. I lurched and struck, with my shoulders wedged against the cliff directly over where they crouched. The overhead sky was darkened as Polter scrambled upward.

Alan was still screaming futilely, "George—up! Get out!"

Babs huddled with white, horrified face, staring. Then I went out after Polter. My disappearing legs were great dark blurs in the sky. Alan saw the valley now contracted to a thousand feet of width, with its cliffs equally as high. Then everything was smaller. . . . The sky overhead went dark again; from cliff to cliff a segment of our rolling bodies momentarily spanned the opening.

AND presently Alan realized that the valley had narrowed to a pit. He stood up. "Hurry! Now we can get out after them. Up there!"

The opening above was empty. Polter and I were fighting some distance away. . . .

Dr. Kent was soon large enough to scramble out of the pit. Alan handed the little Babs up to him and followed. Alan saw that they were now in a long gully, blind at one end with a five hundred-foot perpendicular cliff. Against the wall, the titanic form of Polter stood at bay. And I was fronting him. The summit of the cliff was lower than our waists. Triumph swept Alan; he saw that I was the larger! As Polter bored into me my backward step crossed the full width of the gully. Alan shouted:

"Down! Babs—Father!"

They had barely time to flatten themselves in a narrow crevice between upstanding rocks before my foot crashed

down. For an instant the sole of my boot formed a flat black ceiling as it trod and spanned the rocks. Then it lifted; was gone with a blurred swoop. They saw the white blur of my hand come down and snatch a tremendous boulder, raising it with a great sweep of movement into the sky. They saw me crash it against Polter; but it only struck his shoulder. He roared with anger. The whole sky was roaring and rumbling with our shouts and our panting breathing, and the ground was clattering, pounding with our giant tread. Huge loose boulders were tumbled in an avalanche everywhere.

Again it seemed to Alan that our lurching, heedlessly surging bodies must be crushed within these contracting walls. Only our locked, intertwined legs were visible; our bodies were lost in the sky. Then it seemed to Alan that I had heaved Polter upward. And followed him. We disappeared. There was a distant overhead rumble, and the murky sky, with vague patches of far-distant illumination in it, became empty of movement. . . .

The walls presently were again closing upon Alan and his companions. They ran out of the open end of the shrinking little gully and came to a new upward vista. . . .

I FOUND myself a full head and shoulders taller than Polter. And he was tiring, panting heavily. His face was cut and bleeding from the blows of my fists. The rock I heaved struck his shoulder. He roared, head down, and bored into me. He was heavier than I. His weight flung me back. My foot slid on the loose stones of the gully floor. I did not know that Babs, Alan and their father were huddled under those stones!

My back struck the opposite wall. Polter's upflung knee caught me in the stomach, all but knocking the breath from me. He was desperate, oblivious to the closing walls. And as he flung his arms with a grip about my neck, hanging, trying to bear me down, I

saw in his blazing dark eyes what seemed the light of suicide. I think that then, with a sudden frenzied madness he realized that he was beaten. And tried to pull us to the ground and let the walls crush us.

I summoned all my remaining strength and heaved us forward. I broke his hold. His body was jammed back against a lowering wall. Its top seemed almost at our knees. I shoved frantically. He fell backward and I jumped after him.

We were on a great rocky plateau. But it was shrinking, crawling into itself. Spots of light were in the murk overhead; there seemed a distant circular horizon of emptiness around us.

Polter was lying in a heap. But it was trickery, for as I incautiously bent over him his hand crashed a rock against my head. I reeled, with all the world turning black, but did not fall. There was a horrible instant when my senses were going, but I fought to hold them. Blood from a wound on my forehead was streaming in my eyes. I was staggering. Then I realized I was grimly tossing my head, shaking the blood away; and little by little my sight came back.

Polter was on his feet, rushing me. His fist came with an upward swing at my chin, but I ducked my head aside at the last moment.

And suddenly, fighting up there in the open, my mind envisaged how gigantic we were! This was a great upland plateau, rounded with miles of distance and a shadowy, dimly radiant abyss beyond its circular horizon. And I was a thousand feet or more tall! A titan, looming here in the sky!...

MY fist quite unexpectedly caught Polter's jaw. His simultaneous swing went wild, though I leaped backward from it. He staggered, and his arms dropped to his sides. I was crouched forward, guarded, watching him while I gasped for breath. There was the briefest of instants when an

expression of vague surprise swept his face. But I had not knocked him out.

It was death overtaking him. His heart was yielding, overtaxed from this strain; and I think there at the last, he realized it. The blood drained suddenly from his face and lips, leaving them livid. I saw fear, then a wild horror in his eyes. He stood swaying. Then his knees gave way and he toppled. He fell from his height in the air where I stood gazing at him—fell forward on his face, his titanic length spread all across the top of this rocky landscape!

For a moment I did not move. My head was reeling, my ears roaring. Blood streamed into my eyes. I wiped it away with a torn sleeve and stood panting, gazing at the glowing distance around me.

I was a titan, standing there. The body of Polter was shrinking at my feet. The circular abyss of emptiness came nearer as this rocky eminence contracted.

Suddenly my attention went to the sky overhead. Vague distant lights were there. Then a broad flat blur seemed spread over me. Light everywhere was growing. Beyond the nearby brink of the abyss was a white reflected radiance from beneath. Abruptly I realized there was a level, flat white plain running far off there in the distance.

Overhead a radiance contracted into a spot of light. A shape in the sky moved! I heard a far-away rumble—a human voice!

The body of Polter lay at my feet. It was hardly the length of my forearm. I stood, a titan.

And then, with a shock of realization, I saw how tiny I was! This was the broken top of that fragment of golden quartz the size of a walnut! I was standing there, under the lens of the giant microscope in Polter's dome-room laboratory, with half a dozen astounded Quebec police officials peering down at me!

CHAPTER XII

Mysterious Little Golden Rock

I NEED not detail the aftermath of our emergence from the atom. Dr. Kent and Babs followed me out within a few moments. But Alan was not with them! He had seen Polter fall. His father and Babs were safe. The sacrifice he had made in leaving Glora was no longer needed.

Down there on the rocky plateau, Dr. Kent suddenly realized that Alan was dwindling.

"Father, I must! Don't you understand? Glora's world is menaced. I can't leave her like this. My duty to you and Babs is ended. I did my best, Dad—you two are safe now."

"Alan! My boy!"

He was already down at Dr. Kent's waist, Babs's size. He held up his hand. "Dad, good-by." His rugged, youthful face was flushed, his voice choked. "You—you've been a mighty good father to me. Always."

Babs flung her arms about him. "Alan, don't!"

"But I must." He smiled whimsically as he kissed her. "You wouldn't want to leave George, would you? Never see him again? I'm not asking you to do that, am I?"

"But, Alan—"

"You've been a great little pal, Babs. I'll never forget it."

"Alan! You talk as though you were never coming back!"

"Do I? But of course I'm coming back!" He cast her off. "Babs, listen. Father's upset. That's natural. You tell him not to worry. I'll be careful, and do what I can to save that little city. I must find Glora and—"

Babs was suddenly trembling with eagerness for him. "Yes! Of course you must, Alan!"

"Find her and bring her out here! I'll do it! Don't you worry." He was dwindling fast. Dr. Kent had collapsed to a rock, staring down with horror-stricken eyes. Alan called up to Babs:

"Listen! Have George watch the chunk of gold-quartz. Have it guarded and watched day and night. Handle it carefully, Babs!"

"Yes! Yes! How long will you be gone, Alan?"

"Heavens—how do I know? But I'll come back, don't you worry. Maybe in only a day or two of your time."

"Right! Good-by, Alan!"

"Good-by," his tiny voice echoed up. "Good-by, Babs—Father!"

Babs could see his miniature face smiling up at her. She smiled back and waved her arm as he vanished into the pebbles at her feet.

The eyes of youth! They look ahead; they see all things so easily possible! But old Dr. Kent was sobbing.

IT has broken Dr. Kent. A month now has passed. He seldom mentions Alan to Babs and me. But when he does, he tries to smile and say that Alan soon will return. He has been very ill this last week, though he is better now. He did not tell us that he was working to compound another supply of the drugs, but we knew it very well.

And his emotion, the strain of it, made him break. He was in bed a week. We are living in New York, quite near the Museum of the American Can Society for Scientific Research. In a room of the biological department there, the precious fragment of golden quartz lies guarded. A microscope is over it, and there is never a moment of the day or night without an alert, keen-eyed watcher peering down.

But nothing has appeared. Neither friend nor foe—nothing. I cannot say so to Babs, but often I fear that Dr. Kent will suddenly die, and the secret of his drugs die with him. I hinted once that I would make a trip into the atom if he would let me, but it excited him so greatly I had to laugh it off with the assurance that of course Alan will soon return safely to us. Dr. Kent is an old man now, unnaturally old, with, it seems, the full weight of eighty years

pressing upon him. He cannot stand this emotion. I think he is despairingly summoning strength to work upon his drugs, fearful that he will not be equal to it. Yet more fearful to disclose the secret and unloose so diabolical a power.

There are nights when with Dr. Kent asleep, Babs and I slip away and go to the Museum. We dismiss the guard for a time, and in that private room we sit hand in hand by the microscope to watch. The fragment of golden quartz lies on its clean white slab with a brilliant light upon it.

Mysterious little golden rock! What secrets are there, down beyond the vanishing point in the realm of the

infinitely small! Our human longings go to Alan and to Glora.

But sometimes we are swept by the greater viewpoint. Awed by the mysteries of nature, we realize how very small and unimportant we are in the vast scheme of things. We envisage the infinite reaches of astronomical space overhead. Realms of largeness unfathomable. And at our feet, everywhere, a myriad entrances into the infinitely small. With our selves in between—with our fatuous human consciousness that we are of some importance to it all!

Truly there are more things in Heaven and Earth than are dreamed of in our philosophy!

INVISIBLE EYES

AN invisible eye that can see in the dark and detect the light of a ship two miles away on a black foggy night was introduced to newspaper men recently by its inventor, John Baird of television fame. He calls the invention "Noctovisor."

It looks like a large camera and can be mounted on a ship or airplane. It was announced that it would soon be tried on trans-Atlantic liners. For the demonstration it was mounted in the garden of Baird's cottage, overlooking the twinkling lights of Dorking. In the dark beyond those lights an automobile headlight three miles away pointed toward the cottage.

At a signal from the inventor a sheet of

ebonite, as a substitute for a supposed fog, two miles thick, was placed in front of the headlight. Not a glimmer was then visible to the human eye, but it appeared on the noctovisor screen as a bright red disc. It was supposed to have particular value in permitting a navigator in a fog to tell the exact direction of a beacon and to estimate roughly its distance.

The device is a combination of camera lens, television transmitter and television receiver. The lens throws a distant image on the exploring disc of the transmitter, through which it acts on a photo-electric cell sensitive to invisible infra-red rays. The receiver amplifies it for the observer.

MOON ROCKETS

SEVENTEEN years of experimenting on a rocket designed by Prof. Albert H. Goddard of Clark University, to shriek its way from the earth to the moon, came to a glorious climax recently in an isolated and closely guarded section of Worcester when the rocket tore its flaming way through the air for a quarter-mile with a roar heard for a distance of two miles.

Prof. Goddard said the rocket was shot out of its cradle, careened through the air a mass of flame, and landed about where it was directed to land, beyond the Auburn town line. Test of a new propellant was the object of his demonstration, Prof. Goddard said.

Two or three times a week a small rocket goes up into the air a short distance, not enough to attract great attention. But the latest was a nine-foot rocket, shot out of a forty-foot tower. Near the tower is a safety post built of stone, with slits for peepholes. The experimental party stepped into the safety zone when the rocket was started.

The forty-foot tower is built much like an oil well derrick. Inside it are two steel rails to fill grooves in the rocket. These guide the rocket much as rifling in a gun barrel guides the bullet. Prof. Goddard, when teaching at Princeton in 1912, evolved the idea of shooting a rocket to the moon by means of successive charges of explosive much as the new German rocket motor racers are powered. In this most recent experiment he used a new powder mixture.

Prof. Goddard issued a statement after the demonstration, which said:

"My test was one of a series of experiments with rockets using an entirely new propellant. There was no attempt to reach the moon or anything of such a spectacular nature. The rocket is normally noisy, possibly enough to attract considerable attention. The test was thoroughly satisfactory, nothing exploded in the air, and there was no damage except possibly that incidental to landing."



"Eddie!" Lina screamed suddenly. "Look out!"

Terrors Unseen

By Harl Vincent

SOMETHING about the lonely figure of the girl caused Edward Vail to bring his car to a sudden stop at the side of the road. When first he had glimpsed her off there on that narrow strip of rock-bound coast he was mildly surprised, for it was a desolate spot and seldom frequented by bathers so late in the season. Now he was aroused to startled attention by the unnatural

posture of the slender body that had just been erect and outlined sharply against the graying September sky. He switched off the ignition and sprang to the ground.

Bent backward and twisted into the attitude of a contortionist, the little figure in the crimson bathing suit was

a thing at which to marvel. No human being could maintain that position without falling, yet the

One after another the invisible robots escape Shelton's control—and their trail leads straight to the gangster chief Cadorna.

girl did not fall to the jagged stones that lay beneath her. She was rigid, straining. Then suddenly her arm waved wildly and she screamed, a wild gasping cry that died in her throat on a note of despairing terror. It seemed that she struggled furiously with an unseen power for one horrible instant. Then the tortured body lurched violently and collapsed in a pitiful quivering heap among the stones.

Eddie Vail was running now, miraculously picking his way over the treacherous footing. The girl had fainted, no doubt of that, and something was seriously wrong with her.

A mysterious mechanical something whizzed past; something that buzzed like a thousand hornets and slithered over the rocks in a series of metallic clanks. Then it was gone—or so it seemed in the confusion of Eddie's mind; but he had seen nothing. Probably a fantasy of his overworked brain, or only the surf breaking against the sea wall. He turned his attention to the girl.

SHE was moaning and tossing her head, returning painfully to consciousness. He straightened her limbs and placed his folded coat under the restless head, noting with alarm that vicious red welts marred the whiteness of her arms and shoulders. It was as if she had been beaten cruelly; those marks could never have resulted from her fall. Poor kid. Subject to fits of some sort, he presumed. She was a good looker, too, and no mistake. He smoothed back the rumpled mass of golden hair and studied her features. They were vaguely familiar.

Then she opened her eyes. Stark terror looked out from their ultramarine depths, and her lips quivered as if she were about to cry. He raised her to a more comfortable position and supported her with an encircling arm. She did cry a little, like a frightened child. Then, with startling abruptness, she sprang to her feet.

"Where is it?" she demanded.

"Where's what?" Eddie was on his feet, peering in all directions. He remembered the queer sounds he had heard or imagined.

"I—I don't know." The girl passed a trembling hand before her eyes as if to wipe away some terrifying vision. "Perhaps it's my imagination, but I felt—it was just as real—one of father's iron monsters. Beating me; bending me. I'd have snapped in a moment. But nothing was there. I—I'm afraid...."

Eddie caught her as she swayed on her feet. "There now," he said soothingly, "you're all right, Miss Shelton. It's gone now, whatever it was." Iron monsters! In a flash it had come to him that this girl he held in his arms was Lina Shelton, daughter of the robot wizard. No wonder she was afflicted with hallucinations! But those bruises were real, as was the forcible twisting of her lithe young body. And he had heard something.

"**Y**OU know me?" The girl was calmer now and faced him with a surprised look.

"Yes, Miss Shelton. At least I recognize you from the pictures. Society page, you know. And I'm Edward Vail—Eddie for short—on vacation and at your service."

The girl smiled wanly. "You know of father's break with Universal Electric? Of his private experiments?"

"I heard of the scrap and of how he walked out on the outfit, but nothing further." Eddie thought grimly of how nearly he had come to losing his own job when David Shelton broke relations with his employers. He had been to enthusiastic in support of some of the older man's claims.

"It's been terrible," the girl whispered. She clung nervously to his arm as he picked the way back to the road. "The loneliness, and all. No servants will stay out here now, and father spends all of his time in the laboratory. Then—this fear of the mechanical men—they haunt me. I—I guess they've got me a little goofy."

V
5
3
M
A
R
3
XUM

Eddie laughed reassuringly. "Perhaps," he suggested, "you will let me help you. Your father, I believe, will remember me, and I'll be very glad to—"

"No, no!" The girl seemed frightened at the thought. "I'm sure he wouldn't welcome you. He's changed greatly of late and is suspicious of everyone, even keeping things from me. But it's awfully nice of you to offer your assistance, and you've been a perfect peach to take care of me this way. I—I'd better go now."

They had reached the road and Eddie looked uncertainly at his roadster. He hated to think of leaving the girl in this lonely spot. She was obviously in a state of extreme nervous tension and, to him, seemed pathetically helpless and afraid.

"That the house?" he asked, pointing in the direction of the gloomy old mansion whose dilapidated gables were barely visible over the tree tops.

"Yes." The girl shivered and drew closer to him.

The ensuing silence was broken by the slam of a door. His car! Eddie looked toward it in amazement; he was hearing things again. The springs sagged on the driver's side as under the weight of a very heavy occupant, but the seat was empty. Then came the whine of the starter and the motor purred into life. The gears clashed sickeningly and the car was jerked into the road with a violence that should have stripped the differential. He pulled the girl aside just as it roared past and disappeared around the bend in a cloud of dust. The sound of the exhaust died away rapidly and left them staring into each other's eyes in awed silence.

DAVID SHELTON was prowling around in the shrubbery when they approached the house—a furtive, unkempt creature whom Eddie would hardly have recognized. He straightened up and peered at his daughter's companion with obvious disapproval.

"Lina," he said severely, "I've told you we want no visitors."

"Yes, Dad, I know, but Mr. Vail's car was stolen out in front and there is no way for him to go on. We must look after him."

"His car—stolen? Who stole it?" David Shelton drew close and glared suspiciously at his unwelcome visitor.

"One of your monsters, I think," she replied shakily, "though we could see nothing. And the same thing attacked me and beat me. Look at my bruises!"

Shelton was examining the marks, and his fingers trembled as he touched his daughter's shoulder. He looked piteously into her eyes. "Are you sure, Lina? Sure? Did you see it?"

"No, no. But I felt and heard—the iron arms and the clamps and the buzzing. Oh, it was horrible!" The girl's voice rose hysterically.

"Oh, Lord! What have I done?" groaned Shelton. "It's true, then. Lina, listen: I've succeeded in making them invisible, and one got away this morning. But I thought—I thought—" He looked at Eddie, remembering his presence suddenly. "But I'm talking too much. It seems to me I remember having seen you before, young man."

"You have, sir," Eddie stated. "In the research laboratory of Universal Electric. I work with Borden."

"They've sent you to find me?" Shelton stiffened perceptibly.

"Indeed, not, sir. I'm on vacation and was merely passing by when I saw your daughter in danger, a danger I still do not understand."

"Yes, and he helped me to the road," Lina interposed, "and then lost his car at the hands of—"

"Silence!" the father thundered. But his eyes fell before the fire that instant flashed in those of the girl.

"Now, you listen to me!" she returned angrily, "I've stayed on here with you until I'm nearly crazy with your everlasting puttering and experimenting—hearing your uncanny machines walking around in the middle of the night—seeing impossible sights—

then, this thing I couldn't see but could feel. And you've gotten into such a state that you'll go crazy yourself, if you continue. Something's got to be done, I tell you. I can't stand it!"

HER voice broke on a choked sob. "But Lina—"

"Don't but me, Father. I mean it. Mr. Vail discovered your hideout quite by accident and he's been very nice to me. I tell you he means no harm and I want him to stay. If you're not decent to him, if you send him away, I swear I'll go too. I will—I will!"

Shelton's eyes misted and something of the hardness left his expression. A look of haunting fear took its place and he stared pleadingly at Eddie.

"Br-r! I'm cold!" Lina exclaimed irrelevantly. "And—and I believe I'm going to cry." She turned away and raced for the shelter of the gloomy old house without another word.

Eddie turned inquiring eyes on his unwilling host.

"Just like her mother before her," Shelton muttered softly. Then he faced the younger man squarely and his shoulders straightened. "Mr. Vail," he said sheepishly, "I've been a fool and I ask your pardon. But Lina doesn't know. There's something tremendous behind all this, something that's gotten beyond me. I'll send her away for her own safety, but I must stay on. If—if only there was someone I could trust—"

"You can trust me, sir," Eddie stated simply.

The older man paced the ground nervously, and Eddie could see that he was under a most severe mental strain. Several times he halted in his tracks and peered anxiously at his guest. Then he seemed to make a sudden decision.

"Vail," he said sharply, "I need help badly. I want you to stay, if you will. You swear you'll not reveal what I am about to show you?"

"I swear it, sir."

"You'll not report to Universal?"
"Never."

THEY surveyed each other appraisingly. Eddie was mystified by the happenings of the day and was curious to learn more concerning these mythical invisible creations. It was inconceivable that the scientist had spoken truly of his accomplishment. Yet, he had done some marvelous things with Universal and, maybe—well, anyway, there was the girl.

"Come with me," Shelton was saying: "I believe you're a square shooter, Vail." He was leading the way along the gravel path at the side of the house. Before them loomed the squat brick building that was the laboratory.

The door crashed open before Shelton's hand had reached the knob, and one of those buzzing, unseen, non-strosities rushed clanking by, knocking the scientist from his feet in its passage. Ponderous, speeding footsteps crunched the gravel of the path, and then, with a wild thrashing of the underbrush alongside, the thing was gone.

Eddie bent over the prostrate man and saw that he was unconscious. A thin trickle of blood ran from a cut in the side of his head.

"Lina! Lina!" called Eddie frantically. For the first time in his life he was genuinely frightened.

HE half carried, half dragged the limp body through the door of the laboratory and propped it in a chair. It required but a moment for him to see that Shelton's injury was inconsequential. He had only been stunned and already showed signs of recovering.

"What is it, Mr. Vail? What's happened?" came the voice of Lina Shelton breathlessly. She was framed in the doorway, dressed now and panting from her exertions in responding to his call. "Oh, it's father," she wailed, dropping to her knees at his side. "He's been hurt. Badly, too."

"No, not badly, Miss Shelton. He'll

be around in a minute. I'm sorry to have excited you, but when I called I feared it was worse than it is." He was washing the blood from her father's small wound as he spoke.

She took the basin from his hand, spilling some of the water in her eagerness. "Here, let me have that cloth," she demanded.

Eddie admired her as her deft fingers took up the task. She was as exquisite in a simple sport outfit as she had been in her bathing suit.

The scientist opened his eyes after a moment. Remembrance came at once and he sat erect in the chair, staring.

"Lina!" he exclaimed, grasping her hand conclusively. "You're here, thank God! I dreamed—oh, it was horrible—I dreamed they had you." He clung to her closely.

"They?" she murmured inquiringly.

"Yes. Two of them are loose now. It's danger for you, my dear. You must leave at once. No, no—I can't let you out of my sight until they are captured or destroyed." He rose to his feet in his agitation and shook his head to clear it. He looked pleadingly at Eddie as if expecting him to offer a solution of the difficulty.

"Vail!" he exploded, then, pointing a shaking forefinger at an elaborate short-wave radio transmitter which occupied a corner of the large room, "I ask you to bear witness. That is the source of energy for these creations of mine and it's shut down. How on earth can they keep going? I ask you."

"Perhaps someone else, sir," Eddie suggested doubtfully. "Have you any enemies who might be able to duplicate the impulses of that apparatus?"

"Bah! Enemies, yes—with Universal—but none who could duplicate the complicated frequencies I use. My secrets are my own. I've never even put them on paper."

EDDIE was examining the intricate apparatus. "You knew of the first one's escape, didn't you?" he asked. "How did it happen?"

Shelton again became the enthusiastic scientist. "Here," he said, "I'll show you and you can judge for yourself." He strode to the gleaming figure of a seven-foot robot of startlingly human-like appearance.

Lina let forth an exclamation of repugnance and fear.

"No, Mr. Shelton," Eddie objected. "The same thing will occur again. Then there will be three."

"We'll fix that, my boy." The scientist was removing cover plates from the hip joints of the mechanical man. "I'll disconnect the cables that feed the locomotors. He can't walk then."

Eddie was still doubtful but dared offer no further objection, especially since Lina Shelton was watching in wide-eyed silence. He examined the monster and saw that it was quite similar in outside appearance to those supplied by Universal for heavy manual labor, excepting that this one was armed as were those used for prison guards. There were the same articulated limbs and the various clamps and hooks for lifting and heavy hauling; the tentacles for grasping; machine guns front and back. Under the helical headpiece that was the antenna this robot seemed to have two eyes—a new feature—but closer examination showed these to be the twin lenses of a stereoscopic motion picture camera. This robot, then, could see. Or at least it could record what the lenses saw for its masters.

"There," Shelton grunted when he had finished his tinkering, "he's paralyzed from the waist down. Let this one try and get away from us."

"Guns aren't loaded, are they?" Eddie asked.

"Lord, no! Never have any of them loaded. That would be a fool stunt." Shelton had pulled the starting handle of a motor-generator and its rising whine accompanied his words.

THE vacuum tubes of the transmitter glowed into life and the scientist manipulated the controls rapidly.

Lina was watching the robot with fascinated awe. Its arms moved in obedience to the controls, tentacles waved and coiled; the humming of its internal mechanisms filled the room. The locomotion controls had no effect, as the scientist had predicted. Eddie drew a sigh of relief.

"Now, Vail, watch," Shelton exulted. "I'll show you what I was doing with the first one." He closed a switch that lighted another bank of vacuum tubes behind the control panel.

"You can make this one invisible?" Eddie asked incredulously.

"Certainly—from the waist up. This ought to be good."

"Mind telling me the principle?"

"Not at all—now. I've your promise of secrecy. It's a simple matter, Vail, really. Just a problem of wave motions—light. Invisible light; the ultra-violet, you know. My robots are built of specially alloyed metals which permit great freedom of molecular vibration. The insulating materials and even the glass of the camera lenses are possessed of the same property. Get it? I merely set up a wave motion in the atoms of the material that is in synchronism with the frequency of ultra-violet light, which is invisible to the human eye. All visible colors are absorbed, or more accurately, none are reflected excepting the ultra-violet. Perfect transparency is obtained since there is neither refraction nor diffraction of the visible colors. And there you are!"

Eddie stared at the upper half of the robot and saw that it was changing color as Shelton tuned the transmitted wave. Then suddenly it was gone. The entire upper portion of the mechanism had vanished; had just snuffed out like the flame of a candle. He could see down into the tops of the thing's hollow legs. Shelton laughed at him as he stretched forth his hand and hesitantly felt for the invisible mid-section and upper body. It was there all right, unyielding and cold, that metal body. But no trace of it was visible to the

eye. He drew back his fingers as if they had touched a hot stove. The thing was positively uncanny.

"Dad! Turn it off—please," Lina begged. "It's getting on my nerves. Please!"

Obligingly, Shelton pulled the switch. "Now you'll see," he said to Eddie, "whether the same thing happens. Watch."

MISTILY at first, the outlines of the monster's torso and arms came into view, semi-transparent but clouding rapidly to opacity. Then it glinted with the barely visible violet, a solid once more, rigid and motionless. It was a lifeless mechanism, for the source of its energy had been cut off. Eddie had an almost irresistible impulse to pinch himself.

Then he gasped audibly, as did Shelton, for the thing snuffed out of sight again without warning, and the hum of its many motors resumed. There came a terrific clanking as it waved arms and tentacles and violently threshed with its upper body. But the visible portion, its legs, remained rooted to the floor of the laboratory. Lucky it was that the scientist had disconnected those wires; lucky too that the machine guns were empty of ammunition.

"There now—see?" Shelton's voice rose excitedly. "It's been no fault of mine. The power is off but it moves—it moves. What on earth do you suppose—"

Eddie's shout interrupted him. He had seen something at the window: a face pressed against the pane and contorted with unutterable malice. Then it was gone. With the shout of warning still in his throat, Eddie bounded through the door in pursuit of the intruder. Lina's cry of recognition followed him into the twilight. "Carlos!" she had called.

He saw a stocky figure slink around the corner of the laboratory and make for the underbrush beyond. In a flash he was after him. No, he thought grimly, Shelton hadn't any enemy

V
5
3
M
A
R
3
XUN

clever enough to duplicate his transmitter! The hell he didn't! Who the devil was this fellow Carlos anyway? He tore savagely at the impeding branches as he plunged deeper and deeper into the thicket.

IT was a fruitless chase and Eddie soon retraced his steps to the laboratory. Swell mess he'd gotten himself into! His car was gone: probably wrapped around a tree by this time. And here was a situation that spelled real danger, a thing with which Shelton was utterly unable to cope. As a matter of fact, he was so impractical—such a visionary cuss, after the fashion of all geniuses—that he'd never be convinced of the seriousness of the matter until it was too late. What to do? The girl was a corker, though, and game as they made 'em. Just the sort a fellow could tie to. . . .

Lina's firm clear voice came to him through the open door of the laboratory. "Dad," she was saying, "why don't you give it up? Let's go back to New York where it is safe for you and for me. Let the things go and forget about them. What do they amount to, after all? We've plenty of money and you already have earned enough fame to last the rest of your life. Come on now—please—for me."

"What do they amount to?" Shelton reiterated, his voice rising querulously. "Lina, it's the most tremendous thing I've ever done. Think for a moment of what my robots could accomplish in the next war. And there'll be a next war as sure as you're alive. Think of it! No sending of our young manhood into the bloody fields of battle; no manning of our air fleets with the cream of our youth; no bloodshed on our side whatsoever. Instead, these robots will fight the war. They'll fight other robots too, no doubt, but the property of invisibility will be an invincible weapon. It will be a war that will end war once and for all. You can't—"

"Nonsense, Father," the girl returned

sharply. "You've let your enthusiasm run away with your judgment. See what's happened already?—someone's figured it out before you've even perfected the thing. An enemy of our country could do the same in wartime. Maybe it's a foreign spy who has done what's been done to-day."

EDDIE walked into the laboratory. "Couldn't find him," he announced briefly.

"No difference," said Shelton. "He doesn't count in this. We called to you when you rushed out, but couldn't make you hear."

"Who is he?" Eddie asked shortly. What he had overheard made him more than ever impatient with the older man. So clever and yet so dense, Shelton was.

Lina avoided his gaze.

"Only Carlos—Carlos Savarino," said Shelton, carelessly, "a Chilean, I think. He worked for me for two months during the summer and I fired him for getting fresh with Lina. Good mechanic, but dumb as an ox. Had to tell him every little detail when he was doing something in the shop. I'd have saved time if I'd done it myself."

The girl looked at Eddie squarely now. She was flushing hotly. "And I horsewhipped him," she added.

"Yes," Shelton laughed; "it was rich. He sneaked away like a whipped puppy, and this is the first time we've seen him since."

Eddie whistled. "And you think he doesn't count in this?" he asked.

"Of course not. Too dumb, I tell you. Doesn't know the first principles of science. He thinks the only wave motion is that of the ocean." Shelton chuckled over his own jest.

"I wouldn't be too sure," Eddie snapped. "And I want to tell you something, Mr. Shelton. Through no fault of my own, I heard some of your conversation with Li—with your daughter, before I returned here. I was puzzled over your reasons for working so absorbedly on this thing,

but now I know them and I think you're wasting your time and keeping your daughter in needless danger."

"You dare talk to me like this!"
Shelton roared.

"I do, sir, and you'll thank me later." Eddie returned the older man's glare with one equally savage.

Lina's gurgle of laughter broke the tension. "He's right, Dad, and you know it," she interposed. "Let him finish."

Eddie needed no such encouragement, though it warmed his heart. And Shelton listened respectfully when he continued, "I'm into this now, sir, and I intend to see it through to the end. I'll keep your secret, too, though I doubt if it'll ever be of much value to you. Know what I think? I think this Carlos is a damn clever fellow instead of the ass you took him to be. He probably just pretended he was ignorant of science. Why shouldn't he? That way he got a liberal education from you in the very things he wanted to find out. Since you tied the can to him he's had plenty of chances to build a duplicate of your control apparatus—with the aid of some foreign government, no doubt—and now they've stolen two of your machines to complete the job. Your secret already is out and in the very hands you've tried to keep it from."

SHELTON paled visibly as Eddie talked. "But—but how—" he stammered.

"How should I know how they did it?" the younger man countered. "Here—let's take a look around. I'll bet they've left their trail right here in this room."

He walked from one end of the laboratory to the other, peering into corners and under work benches as he passed. Shelton trailed him like a shadow, squinting through the square lenses of his spectacles.

They carefully avoided the partially invisible robot, for the humming of its upper motors continued and clank-

ing sounds occasionally issued from the unseen upper portion. The enemies of David Shelton were still at work on their hidden controls.

"Here—what's this?" Eddie exclaimed suddenly, pointing out a glinting object in a dark corner of the laboratory.

Shelton examined it closely, looking over his shoulder. The object he had located seemed to be a mounted and hooded lens, a highly polished glass of about two inches diameter with its mounting attached rigidly to the wall.

"Never saw that before," Shelton stated with conviction. "And—why—it looks like an objective such as those used in the latest automatic television transmitters."

"Just what it is," Eddie grunted. He picked up a pinch bar from a nearby tool rack and drove its end through the glass as he spoke the words.

A violent wrench tore the thing loose and broke away a section of the thin plastered wall. There, in the cleverly concealed cavity behind, was revealed the mechanism of the radio "eye." Somewhere, someone had been watching their every move. And abruptly the thrashings of the robot ceased and its upper portion again became visible.

WELL," said David Shelton. "Well! Looks as if you're right, young man. I'm astonished." His watery eyes looked sheepishly over the rims of his glasses.

Lina watched their every move. She seemed to sense the seriousness of the situation far more than did her father.

Then the lights went out. It had darkened to night outside and the blackness and silence in the laboratory was like that of a tomb.

"They've cut the wires," Eddie whispered hoarsely. "Got any weapons here, Shelton?"

"Yes. A couple of automatics. I'll get them." The scientist was no coward, anyway. His whispered words came calmly through the silence.

V
5
3
M
A
R
3
1
XUM

Eddie heard him shuffle a few steps and fumble with a drawer of the desk. In a moment the cold hard butt of a pistol was thrust into his hand. It had a comforting feel.

"Stay here with Lina," he commanded. "I'll go out and see if I can find them. This looks nasty to me."

"No," came the girl's voice, "I'm going too."

"You are not," Eddie hissed. "You'll stay here or I'll know the reason. It's dark as a pocket outside and my eyes are as good as theirs. I'll get 'em if they're around here. You hear me?"

"Yes," she whispered meekly.

Edward Vail, only that morning headed for rest and quiet, was now out in the night, stalking an unknown and vicious enemy. And—for what? As he asked himself the question, the smile of Lina seemed to answer him from the blackness. *Cherchez la femme!* He was getting dotty as he neared his thirties. Maybe it was the hard work that had affected his mind.

THE black hulk of the old house loomed against the scarcely less dark sky. There was no moon, and in only one tiny portion of the heavens were the stars visible. Mighty few of them at that. The swish-swish of the surf came to his ears faintly. Or was it someone creeping along the wall of the house? He held his breath and waited.

They wouldn't use the robots at night. Couldn't follow their movements in the televi... if such an attachment had been built into their control transmitter. No, the devils would be here in person.

A muttered Teutonic curse sounded close at hand. That wouldn't be Carlos. God! Were the heinies mixed up in this thing? Just like 'em to be swiping a new war machine; but hadn't they gotten enough in 1944? Without warning he was catapulted from his feet by the impact of a heavy body. He struck the ground so violently that the pistol was jarred from his hand.

Disarmed before the fight had started!

Then he was rolling over and over, battling desperately with an assailant who was much larger and heavier than himself. He was dazed and weakened from his initial dive to the hard ground. All rules of boxing and wrestling were forgotten. Biting, kicking, gouging, all were the same to this silent and powerful antagonist. It was catch-as-catch-can in the darkness, and mostly the other fellow could and did. He had a grip like the clamp of a robot. Trying to dig out one of his eyes? Eddie saw stars—and lashed out with all his might, his flying fists playing a tattoo on the other's ribs. Short arm jabs that brought grunts of agony from his big assailant. Try to blind him, would he?

Eddie somehow managed to get on top; his clutching fingers found the other's collar. Then he let loose with terrific rights and lefts that smacked home to head and face. Those outlanders don't like the good old American fist, and Eddie had room to bring them in from way back, now. The fellow had ceased struggling and Eddie's hands were getting slippery. Blood! Must be, for the stuff was warm and sticky. He rested for a moment, breathing heavily. The other was quiet beneath him—knocked cold. He staggered to his feet triumphantly; wondered how many more of them there were.

HE looked around in the darkness, straining his eyes in vain to pierce its thick veil. There was a glimmer of light over there, through a window. The laboratory! The light flickered a second and vanished. A cold fear gripped him and he stumbled through the grounds blindly, finally colliding painfully with the brick wall. He felt his way toward the door, or where he thought it should be.

He dared not call out for fear the others would hear. Where was that damned door? He rested again and listened. Not a sound was to be heard

from within or without. He clawed his way frantically along the unsympathetic wall. It was a mile wide, that laboratory of Shelton's. Ah—at last! Weakly, he staggered within.

"Lina!" he whispered, "Lina! Shelton!"

There was no reply. He fumbled for a match. Funny how slowly his mind worked . . . thoughts coming jerkily like a sound film running at quarter speed . . . fingers shaking so he could scarcely strike a light. The flare showed the laboratory empty of human beings . . . Lina gone . . . that crazy robot . . . quiet now, and visible . . . but grinning at him . . . then darkness. . . .

WHAT a headache! Eddie rolled over and groaned. Astounded by the hardness of his bed and the stiffness of his joints, he roused to instant wakefulness; sat up and stared. Where the devil was he? The laboratory—Shelton's—Lina. He jumped to his feet. Dawn was breaking and its first faint radiance lighted the robot with eery shifting colors. He berated himself: he'd passed out.

He dashed through the door and made a wild circuit of the grounds. Empty! No—there was his automatic, where it had fallen. Blood stains on the grass showed where the encounter had taken place last night. Must have smashed the Dutchman's nose. But he was gone. Everybody was gone. He rushed into the house and from room to room, upstairs and down. The place was deserted.

This was something to think about. Not an automobile around, no neighbors, not even a telephone. When Shelton went into seclusion, he did it thoroughly. Eddie returned to the laboratory and hunched himself in the scientist's chair. Maybe he could think better here.

They had Shelton and his daughter, all right. Kidnapped them. There was probably some detail of his discovery they couldn't dope out, and had de-

Amt. St.

cided to force him into telling them. The devils would use Lina's safety as a threat to force him into anything. Horrible, that thought. And Carlos already had made advances to her.

Startled by a sharp click, he turned around. The robot was whirring into life. Fast workers, whoever Shelton's enemies were, and up early! He found the pinch bar with which he had wrecked the television apparatus and, with a few mighty blows, destroyed the antenna and headpiece of the mechanical man. They'd not pull off any devilment with this one, anyway.

A wave meter on one of the benches attracted his attention and he twirled its knob. It gave strong indication at one and a half meters. The wave length of their control transmitter! If only he could find—but there it was: a direction finder. Hastily, he lighted its tubes and tuned to the frequency shown by the meter. He rotated the loop over the compass dial and carefully noted maximum and minimum signals. He had a line on the transmitter! And it must be close by, for the intensity of the carrier wave was tremendous.

SLIPPING the automatic into his pocket, he left the laboratory and struck out through the underbrush in the direction Carlos had taken the day before. Fighting his way through the tangled shrubbery, he kept his eyes constantly on the needle of the magnetic compass he had wrenching from the direction finder. It was tough going through the thicket, and just as bad across a swampy clearing where he was mired to the knees before he got across. Up the hill and into the woods he forged, keeping doggedly to the direction he had determined. This was rough country, less than a hundred miles from New York but uncultivated and unsettled excepting for the few summer places along the shore. He'd heard that these backwoods were infested with rum-runners and hijackers, a cutthroat gang.

V
5
3
M
A
R
3
1
XUM

There was a cabin off there through the trees, almost on the line he was following. Must be what he was looking for. He advanced cautiously, creeping stealthily from tree to tree.

Voices came to his ears, and the throb of a motor-generator. It was the place, all right. He crept closer, and, circling the house, saw that an almost impassable road led to it from the rear. A heavy limousine was parked there in the trees, and another car, a yellow roadster—his own. A feeling of grim satisfaction was quickly dispelled by the sound of a familiar humming. Within a foot of his ear, it seemed to be, and instinctively he ducked.

Click! A powerful clamp had fastened itself to his wrist. One of Shelton's invisible robots! He struck blindly at the unseen monster and was rewarded by a shooting pain up his wrist as one of his knuckles was driven backward by the impact with the hard metal. Bands of writhing metal encompassed his body, pinning his arms to his side and lifting him bodily from the ground. There he hung, kicking and struggling in mid-air, supported by nothing he could see. He closed his eyes and felt of the thing that held him. Cold, hard metal it was—implacable and unyielding.

Clank, clank. The monster was walking with long, jerky strides. The pressure against his ribs brought a gasp of agony from his lips. Each jarring step was an individual and excruciating torture. His breath was cut off by the relentless constriction of one of the tentacles which now encircled his neck. It wouldn't be long now.

THEN, when everything had turned black and he had given up hope, he was dumped unceremoniously on the hard floor of the cabin. A harsh laugh greeted him as he struggled weakly to his knees.

"Thought you could put one over on Al Cadorna, did you?" a voice rasped.

The room spun round as he tried to regain his feet. A mist swam before

his eyes. Al Cadorna! The most picturesque figure in gangland. Credited with a dozen killings and with ill-gotten wealth untold, this leader of the underworld openly boasted that the police had never gotten anything on him. And they hadn't. So it was a criminal who had laid hands on Shelton's robots, not a foreign spy. Worse and worse. He thought of what they might be able to do with these invisible mechanical things: make gunmen out of them; safe blowers; house breakers. Why, society would be at their mercy; banks defenceless; the mints, even—

"Stand up on your pins, you worm! Let's have a look at you!" The muzzle of an automatic was thrust in his abdomen, prodding insistently. Things stabilized in the room and he looked up into the cruellest face he had ever seen, and recognizable from the many pictures which had appeared in the yellow press.

Eddie took in the surroundings at a glance. He was in a low-ceilinged room that was almost unfurnished. In one corner there was a replica of Shelton's robot control, teleview disc and all. Carlos had just pulled the switch and the robot was taking visible form. The man who prodded him with the automatic was Cadorna, no doubt of that. His evil leer and yellow eyes marked him at once. The other occupant of the room was a big square-built man with a patch over one eye and strips of adhesive tape across his nose—his antagonist of the night before. Must have sneaked off after he came to; it was safer to send one of the robots after the verdammt Amerikaner. Eddie restrained a chuckle at the thought.

"Nothing to laugh at, kid!" Cadorna snarled. "You're goin' for a nice long ride pretty quick. Know that?"

Eddie's head was clearing rapidly, but he pretended to sway on his feet. Lina and her father were not in sight. If only he could spar for a little time.

"What's the idea?" he asked. "Haven't you guys got enough?"

"That's our business. We know what we're doin', and when you butted in you just signed your own papers. Dead men don't talk, you know, kid!"

THERE was a door at the other side of the room. If only he could see whether Lina was in there; whether she was alive.

"Tie him up, Gus!" Cadorna kept the pistol pressed into the pit of Eddie's stomach as he gave the order. "Hands and feet—and make it a good job, you wiener."

Eddie shouted then, "Lina!" Resistance was useless, but it would give him some satisfaction to know she still lived even though Cadorna pulled that trigger in the next instant. No reply came from beyond that door.

"So!" Cadorna grinned maliciously. "Another victim! Carlos first, then you, and now—Al Cadorna. If you're worrying about her, kid, you needn't. She'll be perfectly safe with me."

Eddie's roar of rage shook the rafters. Heedless of consequences, he brought his knee up suddenly and violently. Cadorna sank to the floor with a groan, his pistol clattering harmlessly on the rough planks. In a flash Eddie retrieved it, dropping behind the prostrate form of the stricken gangster. Gus had fired and missed. Now he dared not shoot for fear of hitting his chief. Eddie's gun spat fire and the big German clapped his hands over his heart, his good eye widening in surprise. Then he reeled and pitched forward on his face. A feminine cry sounded from the adjoining room and Eddie's heart skipped a beat when he heard it.

Carlos was padding across the floor, trying to get into a position where he could fire without endangering Cadorna. Eddie swung his pistol arcund and pulled the trigger. A miss! He fired again, but too late. Fingers of steel had gripped his wrist and the king of gangland rolled over on him, twisting the gun from his hand. Clubbed now, the pistol was raised high over that

distorted, malicious face. Eddie tried to twist away from under the blow as it started its downward swing, then a thousand steam hammers hit him all at once and . . . blackness . . .

SOMETHING was pounding insistently at the doors of his consciousness. He must pull himself together! They'd left him for dead and he was—almost. But voices as loud and raucous as those would waken the dead. He groaned with pain when he attempted to move his head.

"That for you, you rat." It was Cadorna's voice. "Try to take my woman, will you?"

The pounding resolved itself into the angry barking of an automatic. Someone squealed with mortal agony. Eddie opened his eyes cautiously and saw that the room was full of people. The pungent odor of burned powder assailed his nostrils. There was Cadorna and Carlos, David Shelton and Lina. An undersized, dapper youth stood over the body of the big German, his hands outstretched before his horror-stricken face. A moment he stood thus, like a statue. Then his knees gave way beneath him and he crumpled into a grotesque heap beside the man who had been called Gus. Such was the manner of Cadorna's dealing with those who displeased him.

The door to the adjoining room was open. Lina and her father had been kept in there, with the little thug as their guard. Evidently Cadorna had caught him trying to force his attentions on the girl. Good thing he'd killed him.

Lina was sobbing and the sound brought increased agony to the helpless Eddie. He lay still where they had placed him, beside the table which supported the robot control apparatus. His cheek was against the floor and he saw that a little pool of blood was forming there, blood drawn by the butt of Cadorna's pistol when it contacted with his skull. He was bound hand and foot. They hadn't thought him

V
5
3
M
A
R
3
1
XUM

dead, after all. Keeping him for that ride and a watery grave. Couldn't afford to leave his body around where it might be found.

"What are you going to do with us?" Shelton was asking, his voice bravely defiant. Game old sport at that, he was.

"Don't fret over your daughter. Al Cadorna's her protector now, and she'll be taken care of better'n she's ever been. But you—that's somethin' else again. First off, you're goin' to give Carlos the dope on these trick metals in your machines. He couldn't analyze 'em, or whatever you call it. Then you're goin' to have a nice long ride with your friend over there."

"You'll go to the chair for this, Cadorna. And I'll never tell you the secret of the alloys."

"Tell him, Dad," Lina was crying. "He'll let us go if you do."

"The hell I will, girlie. What I said, goes. We'll make him talk first, too," Cadorna snarled.

"Never!" Shelton shouted.

LINA had seen Eddie and, with a little cry, she bounded across the room. Carlos was after her like a panther.

"Hands off that dame!" Cadorna yelled. "Let her cry over the boy friend if she wants to. Won't do her any good. You get busy and set one of the tin soldiers goin'. Make the old buzzard talk."

Carlos muttered sullenly as he started the motor-generator. Give him a chance and he'd knife Cadorna in the back—for Lina.

The girl was kneeling at Eddie's side now, examining his bleeding scalp. He opened one eye and gazed at her solemnly, pursing his lips in a warning to silence. She caught her breath and nodded in understanding.

Cadorna was shouting like a madman. "Keep the damn thing so I can see it, you spig! They make me bug-house when you blink 'em off. Besides, I don't trust you."

The bold Cadorna was afraid of something he couldn't see! An idea flashed across Eddie's quickening mind. But he was helpless—bound so tightly that the cords cut his wrists.

One of the robots was clanking across the room. Lina looked up in momentary terror and Eddie saw her eyes stray over the table top where Carlos was working.

"Want to grab the old one?" the Chilean called.

"Yes. Pick him up and squeeze him till his ribs crack. He'll talk."

Lina let a little moan escape her lips. Eddie was watching as the iron monster approached the scientist and flung its tentacles around his madly struggling form. Lina was fussing with him, trying to turn him over. Cadorna's back was to them, his face thrust into that of Shelton, who was fighting desperately to avoid the crushing grip of the robot.

"Give him a squeeze, Carlos."

SHELTON'S yell brought another low moan from the girl's set lips. She was working furiously at Eddie's bonds. Lord, she had a knife! Good girl! Must have found it on the table. His hands were free and he wriggled his fingers to bring them to life. Then his feet. He was able to move. Lina whispered in his ear.

"All right?" she asked anxiously.

"Yes," he whispered. Somehow their lips touched and Eddie felt his heart pound at his temples. New life came to him with a rush of exaltation.

Shelton was crying out in pain and Lina sprang to her feet. "You beast!" she shouted at Cadorna. "Let him go."

Then she was across the room, tearing at the unyielding metal bands that pinioned her father and slowly crushed him. Cadorna laughed mirthlessly.

"Tell him to give me the dope," he retorted. "Then I'll let him go—for a while."

Shelton's head hung on his chest, rolling weakly from side to side. Eddie doubted whether he could speak

if he wished to. The Chilean was working at the controls, increasing the tension of those terrible tentacles. Eddie raised himself to his knees, watching Cadorna narrowly. He fingered the knife Lina had used in freeing him. No, he couldn't use that. The Chilean would cry out and queer everything. He laid it on the floor, within easy reach.

Cadorna was cursing now, first Shelton and then the girl. His rage was maniacal. "Another notch!" he belowed.

Eddie rose silently and clamped his fingers on the Chilean's windpipe. Lina's eyes widened as she saw. She did everything in her power to keep Cadorna's attention occupied as Eddie sunk those fingers into Carlos' throat. The Chilean's eyes popped from his head as he struggled furiously to tear away the steel-sinewed hand that had stopped off his breath. Death was staring him in the face, and he could not cry out. His strength left suddenly as the fingers dug in deeper, and Eddie shook him as he would a rat. In a surprisingly short time he had slumped to the floor, and not until his squirmings ceased did Eddie loose that awful grip.

"Another notch, you spiggoty!"

EDDIE bent over the controls. Lina's pleadings mingled with the curses of Cadorna. She was cajoling now—telling the brute she'd go with him gladly if only he'd free her father; promising anything, everything, in the desperate attempt to keep him from discovering that his last henchman was out of the picture. But her words served only to spur Eddie to swifter action. He twirled the knobs of the dual control. The second robot was fading from view. He'd give Cadorna a dose of the thing he really feared. He eased off a little on the other control, releasing the pressure on poor Shelton's ribs as much as he dared.

The position indicator of the second robot moved slightly as Eddie started

the invisible monster toward the yelling gangster. He watched the screen closely. It was quite a trick, at that, controlling these things you couldn't see. All you had to go by were these sketchy representations in the television; tiny flecks of light that outlined the various movable members of the robot.

"Eddie!" Lina screamed suddenly. "Look out!"

But he had seen Cadorna wheel around as he watched his image on the screen. At that moment a tentacle was writhing its way around his thick neck. A bullet whistled past Eddie's ear and buried itself harmlessly in the wall.

Then from the blasphemous mouth of the king of gangland there came a shriek of awful fear. The tightening tentacle shut it off in a choking gurgle. Cadorna was captured at last—by a monster he could not see, a monster that struck terror to his craven soul.

It was the work of but a moment to free David Shelton from the grip of the other robot. The tortured man tottered into Lina's arms for support.

Eddie played with Cadorna now, releasing the grip from his throat and pinioning his arms instead. With rapid fingers he manipulated the controls until the screaming gangster was raised high in the air by the unseen arms of the robot.

"Another notch, Al," he chortled.

Cadorna yelled anew as the clamps tightened, "For God's sake, kid, quit it! Let me down. I'll do anything you say."

"Yeah?" Eddie moved one of the rheostat knobs a trifle.

The prince of racketeers was whimpering now, like a baby. The sharp snap of a rib punctured his outcries.

"Another notch," said Eddie grimly.

But the king of the underworld had fainted.

AN hour later Eddie Vail surveyed the scene complacently. Lina had washed the blood from his head and face and bandaged his wound.

Luckily, Cadorna's blow had been a glancing one. The girl was fussing over her father, now, and the scientist was on the point of resenting her attentions; swore he could take care of himself: he wasn't a baby. Carlos and his chief were trussed up like mummies, and had been snarling at each other ever since the Chilean recovered his senses, each blaming the other for their predicament. The robots stood motionless by the wall.

This would be a big haul for the police. Plenty of evidence to send Cadorna to the chair now. The murder of Butch Collins, the undersized thug, had been witnessed by three of them. No, four: Carlos would squeal. He was that kind. There would be rejoicing in the underworld too, for Cadorna had many enemies. They'd be killing each other off in droves though, for the leaders of rival gangs would be battling for his place.

"Guess we'll have to dump them in the limousine," he remarked to Shelton. "Drive them to the nearest town and turn them over to the authorities."

"Yes. Then they can come back for the bodies of the other two." Shelton grimaced as he contemplated the sprawled figures.

"What about your robots?" Eddie asked.

"Why, I'll go ahead with my original plans, of course." The scientist looked surprised.

"Dad!" Lina turned beseeching eyes on Eddie and his heart performed amazingly as he looked into their depths.

"And why not?" asked her father dolefully. "They'll insure the peace of the world. They'll—"

"Listen, Mr. Shelton," Eddie interrupted. "If you'll think a little you'll realize that they'll do no such thing. Has any new and terrible engine of destruction ever accomplished that result? No—the enemy always finds a way of combating the new weapon and of devising another still more terrible. You've discovered a marvelous thing,

but its value is quite problematical."

"How can they ever combat a thing they cannot see?"

"Easily. Why, I could devise a television attachment in two days that would make them visible. Photo-electric cells are capable of detecting ultra-violet light as you well know. Radium glows under its rays. Why not coat a televue screen with some radio-active material?"

SHELTON frowned thoughtfully. "You're right, Vail," he said, after a moment of silence; "absolutely right. It was only a dream."

With dragging feet he walked to the transmitter, his expression grim in the realization of failure. He started the motor-generator with a gesture of finality.

"What are you going to do?" Eddie asked fearfully.

"Watch me! At least I can demonstrate another phase of the basic principle I have discovered."

The motors of both robots whirred.

"Don't!" Cadorna wailed, "For God's sake, don't blink 'em out!"

Carlos cursed his chief for a coward.

Shelton was talking rapidly as he manipulated the controls. Instead of building up the wave motion to the frequency of invisible light he was reducing it. Past the other end of the spectrum and into the infra-red. The heat ray! Both monsters were changing color as he marched them through the door and into the open. But now they glowed with a visible red that rapidly intensified to the dazzling whiteness of intense heat. Cadorna babbled in superstitious terror. Then, in an instant, both mechanisms were reduced to shapeless blobs of molten metal. Lina clapped her hands gleefully.

Shelton looked up with enthusiasm once more shining in his face. "Vail, my boy," he said, "we can find some use for that in industry. Let the next war take care of itself."

"You bet!" Eddie was lost in con-

temptation of the girl—the flush of pleasure that came at her father's words; the shining eyes.

"Then you'll leave the old place down here?" she asked eagerly.

"Yes, as soon as we get rid of these crooks and the other robot. Vail is to spend the rest of his vacation with us, too—if he will."

Would he? Eddie gazed at the girl in rapt admiration and with an inward thrill over his astounding good fortune. Her eyes dropped before the intensity in his and her flush heightened.

David Shelton was wiping his glasses

and peering at them with an understanding smile. Good sport, Shelton—and in some ways as wise as they made them. Eddie waited breathlessly for the girl to speak.

"Oh, that's wonderful, Dad," she approved; "and I'm sure that Mr. Vail will agree."

She turned those glorious eyes on Eddie once more, and her inquiring smile spoke volumes. He opened his mouth to accept the invitation but the words would not come. He could only nod his head vigorously like an abashed schoolboy.

Some vacation!

IN THE NEXT ISSUE

MONSTERS OF MARS

A Thrilling Interplanetary Novelette

By Edmond Hamilton

FOUR MILES WITHIN

A Breath-Taking Adventure into the Earth's Crust

By Anthony Gilmore

THE LAKE OF LIGHT

A Story of a Strange Antarctic Civilization

By Jack Williamson

THE EXILE OF TIME

Beginning the Most Amazing Time-Traveling Novel Yet Written

By Ray Cummings

—And Others!

V
5
3
M
A
R
3
1
XUM



*Yes, there came a strange,
but welcome sight.*

Phalanxes of Atlans

By F. V. W. Mason
CONCLUSION

WHAT HAS GONE BEFORE

VICTOR NELSON and Richard Alden are forced down on a flight over an unexplored Arctic region. Returning from a hunt for food, Nelson finds

his companion gone; but many footprints and blood splashes establish a clear trail to a tunnel, passing beneath a range of very high mountains on the edge of the unexplored area. In following the trail, Nelson encounters and slays

Never did an aviator ride a more amazing sky-steed than Alden on his desperate dash to the great Jarmuthian Ziggurat.



an allosaurus, a terrible, carnivorous species of dinosaur surviving from the Cretaceous era.

Then he presses on to presently emerge in an almost tropical valley and encounter a remnant of the long lost Atlantean race, who are ruled by a dynasty of English-speaking kings—

descendants of Sir Henry Hudson, who had wandered into Atlans after being abandoned by his men.

This valley in the Arctic owes its existence to the thinness of the earth's crust, which permits the interior heat to warm the surface.

The Atlanteans are on the verge of

war with another race, the Jarmuthians, descended from the Lost Tribes of Israel, when Nelson is transported to Heliopolis, the Atlantean Capital, for trial. All strangers must prove their value to the State or be condemned to feed the war monsters.

Nelson soon discovers that Alden had been captured from the Atlanteans by the Jarmuthians. He strikes a bargain with Altiorius, Emperor of Atlans. He will undertake to fight any six of the enemy on condition he and Alden will be released if successful.

Altiorius agrees to Nelson's suggestion and makes a proposal to the Jarmuthians. Heretofore he had been paying them an annual tribute of six maidens, as price for the safety of Altara, Sacred Virgin of Atlans, whom Jarmuth had captured in a previous war. With Nelson's bargain in mind he offers an increase of six maidens to the annual tribute, if the American fails to defeat six Jarmuthian champions. On the other hand, if Nelson wins, all tribute will cease, Altara will not be sacrificed, and Alden is to be returned unharmed.

On a dueling ground between the rival armies Nelson, armed with his Winchester rifle, sallies out to battle with the enemy, who, on their side, are armed with retortii—curious weapons hurling live steam—fungus bombs, swords and lances.

The tricky Jarmuthians, however, mount their men on a diplodocus, a huge dinosaur some eighty-seven feet in length. All seems lost; but by blinding the colossal creature, Nelson destroys its usefulness, and one by one kills the six Jarmuthians.

Stung with rage, the enemy disregard the terms of the contest and attack with their whole army. They are, however, defeated, and the conquered Jarmuthians sullenly turn over Alden and the captive maidens, though Altara still remains in their possession.

After making much of the Americans, Altiorius reluctantly allows his preservers to depart for their plane—

unconscious that the priestly party is planning rebellion against his authority because he did not insist on Altara's return.

CHAPTER VII

THAT'S one of the fixed retortii I was speaking about," remarked Victor Nelson as he paused to point out a tapering brass tube which was mounted on a platform above the long staircase up which he and Alden were toiling. "It's a big brute: see how small the gunners look beside it? These steam guns are wonderful things."

The younger aviator sighed. "I've had enough of miracles," he said wiping his flushed features and hitching a small pack higher on his leather-clad shoulders. "All I want to do is to lay my weary eyes on the plane again. What with these ghastly allosauri, diplodocuses and other monsters, I'm damn well fed up with this place."

Nelson settled his Winchester rifle more comfortably into the hollow of his arm. "Correct. So am I. But we can't say Altiorius didn't do right by our Nell. Good Lord, what a triumph he gave us!" The dark pilot's smile flashed from beneath his neat, close-clipped black mustache. "Wait till Cartier gets a peep at those diamonds he gave us."

Panting, the two halted by mutual consent. "Ever see so many stairs?" grunted Nelson. "Three more flights and we'll be into the tunnel; ah, there's the opening. I only hope these blighters haven't hurt the plane."

Before resuming the climb Nelson shifted his rifle, idly regarding the armored gunners just above; then suddenly he stiffened his wiry body with a sharp cry. "Look out, Dick! What the devil? Those damn fools ahead are swinging the retortii across our—"

THE dark haired aviator's words were drowned out in a deafening, hissing roar that burst from the great

retortii's throat, and his heart gave a great convulsive leap at the sight. Was this an accident—or treachery? An accident of course. Somehow he could not bring himself to think that Altiorius would break his pledged word. Projected in a shimmering, white arm the scalding death vapor shot across the staircase, its hot breath licking the faces of the startled and angry Americans, and quickly forcing them to turn and run downwards to avoid being scalded.

"What the devil are these idiots trying to do?" gasped Nelson, anxiously eyeing the red-crested warriors who, peering down through the blue lenses of their helmets, watched the khaki-clad aviators but made no effort to re-align their retortii. "Hero Giles'll skin those fools alive if he hears of this. Guess we'd better wait a minute: they'll soon shut off the steam."

Shielding his face from the steam clouds that obliterated all view of the staircase above, Alden stood watching the billowing steam clouds in silent awe.

"Terrible, aren't they, Vic?" he remarked. "I've never seen those big fellows in action. They make the portable variety look like water pistols."

AS the steam barrier showed no signs of abating, an uneasy gleam crept into Nelson's dark eye, and with jaw grimly set, he cocked the Winchester and turned with the intention of lodging a complaint at the next station below; but, to his utter dismay, he beheld bronze armored figures on the next platform now training their long-muzzled steam gun across the stair. Even as he sprang back, the deadly white vapor hissed forth from the second retortii, completely barring further retreat down the stair. Like an icy flood the chill of impending doom invaded Nelson's soul. This was no accidental discharge, for with the slightest change of direction in the deflection of either retortii, death would descend upon him and his companion.

Swiftly speech became impossible, as the roar of the huge retortii was deafening; the two were lost in the heart of an opaque cloud which completely blotted out the copper-hued Atlantean sky. Hot blood surged into Nelson's head while he became aware of ghostly and stealthy figures advancing through the shimmering billows of vapor. Up, up, they came, like dream men, their eyes weird and unreal. Cursing the treachery of their late host, Nelson and Alden watched dozens upon dozens of hoplites come swarming up the stairs in solid, dully-gleaming ranks. Apparently intent to take them prisoners, the foremost Atlanteans made a rush, giving the American time to fire just twice.

Unable to retreat, the helpless aviators stood to meet the engulfing wave of hoplites. Nelson struck out as hard as he could at those yelling, red-bearded faces, though he knew the effort was hopeless. He was dimly conscious that Alden, not far away, also fought with the vigor of despair.

With a sense of savage satisfaction, the dark haired aviator felt his fist impact solidly into a yelling, sweating face; then something struck his head and, amid a miniature sunburst, his senseless form sank limply on the damp stones of the great staircase.

AFTER an interval, the length of which he did not know, Victor Nelson opened his eyes slowly, for his head throbbed like a savage's war drum. Uttering a stifled groan he shut the lids to still an overpowering sense of nausea which gripped him, but a moment later he made another attempt to discover in what sort of place he found himself. Gradually, his eyes became accustomed to a curious orange-red glare beyond a series of bars. Bars? The idea fixed itself in his benumbed brain; bars meant prison! Yes, those grim blank walls bore out the assumption. He lay on the damp stone floor of what must be a fairly spacious cell. Beneath his leather aviator's

jacket he shuddered. "Jail, eh? What a nice place to wake up in!"

A groan from behind him prompted Nelson to painfully raise his head and look about. He blinked dazedly, meanwhile trying to focus his eyes, then he heaved a faint sigh of relief as his gaze encountered the muscular, well-proportioned figure of Richard Alden, who half sat, half reclined, against one of the grey stone walls, burying a ghastly pale face between trembling hands.

"You hurt?" To speak, Nelson drew a slightly deeper breath and at once became conscious of a horrible, throat-wrenching stench. Dimly, he recalled having once before encountered such an odor; when was it? Oh, yes; during the Great War when he'd stumbled into a dugout tenanted by long unburied corpses. A cold finger stabbed at his brain. Corpses.

"Are you hurt, Dick?" he repeated hoarsely.

THE lax figure stirred and Alden's blonde head was raised slowly. "I don't know." His voice came very thickly. "I—I'm still dizzy. What's happened?"

"Damned if I know; but those bright boys have evidently heaved us into a calaboose of some kind!"

Nelson, on peering about, had discovered that one end of the cell was closed only by a series of massive bronze bars; the two other walls were solid masonry; while the fourth was also solid but fitted with a small oval door of bronze.

"Calaboose? The hell you say!" Alden coughed feebly. "My God, but that steam was terrible stuff. I nearly smothered before I got knocked out."

Slowly, the younger aviator looked about, and suddenly his eyes widened in an expression of indescribable horror.

"Look!" Alden's voice had died to a shaken whisper. "My God, Nelson, we're finished! Look at that allosaurus!"

FOLLOWING the line indicated by the pilot's shaking forefinger, Nelson peered out through the series of great bars while a shudder shook his aching body. Though he had seen these fearful monsters on many occasions, yet it was never from such a position as that in which he now found himself. To his ears came a sibilant hissing like that of a thousand serpents; and, quivering in every nerve, he forced his eyes open once again, to discover that the cell which he and his companion occupied was but one of a series of cells surrounding a huge square in which were imprisoned perhaps twenty or thirty of those horrible, gargoyle-like creatures which were the Atlantean dogs of war. Some thirty-four feet in length, the enormous, slate-grey monsters hopped leisurely about, their warty hides and huge luminous eyes betraying their reptilian origin. In shape the allosauri resembled loathsome and titanic kangaroos as they lumbered awkwardly to and fro, picking viciously at what appeared to be fragments of human flesh and bones.

While the two prisoners crouched paralyzed with horror, one of the nightmarish creatures came hopping over and, pressing a head as big as a steam scoop against the bars, stared in with huge, pale green eyes. A long minute the ghastly creature remained looking in, clearly outlined by the orange glow from outside.

THE doomed aviators found something fearfully fascinating about those narrow vertical irises set in pupils the size of dinner plates. Uttering a deep growl, the allosaurus shuffled nearer, and impatiently rubbed its huge, bullet head against the bars; then gripped the ponderous bronze bars with its ridiculously small front legs to shake the whole grille-work with a savagery that dislocated bits of plaster and made the metal reverberate. While Nelson and Alden shrank flat against the far wall, a scarlet tongue

at least four feet long flicked the air but a few feet from their bloodless, sweating visages. Becoming irritated at the sturdiness of the barrier, the mountainous reptile tugged harder and hissed, filling the cell with a foul exhalation that stank like the reeks of smoldering rags.

Nelson's wavering consciousness reeled, and a mad, dreadful fear, like that a dreamer suffers in the grip of nightmare, invaded his being. He felt the hairs rising on the nape of his neck.

But, with a squall of rage, the monster abandoned its futile efforts and leaped away. Feigning indifference, the allosaurus picked up a half-gnawed skull with its tiny forelegs; and, while the prisoners watched, it stuffed the head into a maw twice the size of an elephant's and crunched the gruesome titbit as easily as a boy would a walnut. Presently it shuffled off to rejoin the hideous herd in the center of the court.

"Nice kind of a jail we've been thrown into. Wish I could understand what's happened." Alden buried his face in his hands. "It kind of looks as though Altarius had a change of heart."

NELSON replied nothing, but sat staring fixedly out into the horrible court.

"Somehow, I don't think Altarius would do such a thing," he said at last. "Let's think back and see if we can't piece this treachery together."

"Wish I had your faith in the Emperor—but I haven't." Alden's handsome face twisted itself into a wry smile.

"Let's see, now," persisted Nelson, fingering a square jaw upon which sprouted a thick growth of reddish bristles. "There was a deputation of priests to see Altarius yesterday. They were clamoring for the return of Al-tara—the Sacred Virgin—and looked pretty mad when he put them off."

"Maybe this is the private doing of

the priests," admitted Alden. "Any-way, we're in one devil of a fix. There's certainly no way out of this calaboose—and those damned brutes out there look hungry."

Nelson frowned, deep in thought. "Wish I could find a reasonable explanation. I really don't think it's Altarius; still, that's what you get for mixing in on the politics of these forgotten kingdoms."

"But," reminded the other, "you had no choice, old lad. Remember, you mixed in to save me."

From across the courtyard rang a loud, penetrating shriek of fear that made the two aviators spring to their feet and rush to the bars. Peering across the court, they discovered three naked men shrieking and clinging frantically to the bars of an exactly similar cell.

"What's wrong with them?" demanded Alden as the agonized screams rang louder still.

"I don't know," was Alden's breathless reply. "But what's that noise?"

A curious metallic clanking sound filled the poisoned air, and for a moment Nelson remained utterly puzzled. Then, as the noise grew louder, the allosauri commenced to betray a strange restlessness. They ceased basking and feeding, and their hideous heads commenced to dart quickly this way and that.

WHILE the terrific shrieks of the wretches across the court rang to the copper-hued sky, the two Americans remained in doubt; then all at once the chill of death gripped their hearts, as they saw the bars of that cell directly opposite slowly but surely rising! Uttering heart-rending cries, the doomed prisoners clung frantically to stay the vanishing barrier separating them from those appalling man-eaters. But, disdainful of their pitiful efforts, the bronze bars rose relentlessly with metallic rattlings and janglings from some unseen mechanism.

Rooted to the floor, both Americans watched the distant grille vanish into the upper stone-work and heard the ghastly hissing as the allosauri herd commenced to move forward. Sick and shaken, Nelson beheld one of the doomed men cling in desperation to the bars; he was lifted clear of the floor and borne towards the ceiling, meanwhile venting his terror with such screams as could otherwise have risen only from an inquisitor's torture chamber.

The tragedy was swiftly completed. Half a dozen of the nearest allosauri, taller than any giraffes, suddenly sprang forward, their long, naked tails rising as their gait increased. Snarling horribly, the vast slate-colored beasts plunged into the cell, terminating shrieks of mortal terror. Backs broader than bus tops squirmed and tugged, then one of the loathsome monsters reappeared carrying in its dripping jaws a mangled, yet struggling victim much as a cat carries a mouse. In a trice the other allosauri came rushing eagerly up, seeking to snatch the prey from the first monster.

Nelson stiffened. "Great God! And that's what'll happen to us!"

WEAKENED by his head wound, and blind with nausea, he stumbled to the rear of the cell to collapse upon a pile of foul straw, littered with equipment which the superstitious captors must have condemned together with the owners.

Nelson sank upon them, then stiffened, for his outflung hand had encountered a hard, familiar outline. It was a .45 automatic pistol.

A moment's furious search revealed that the captors had missed or not understood the use of the weapon in Alden's leather flying coat.

"God, but we're lucky," Nelson panted. "The Atlanteans never saw this pistol of yours. They're only used to my rifle."

Hope lit Alden's features, then faded. "But what good is a .45 against

brutes like those? Might as well have a pop gun!"

"Still we're lucky," grunted Nelson, delighted to find the magazine yet filled. "Can't tell what's ahead. Yes, we're the luckiest—"

He broke off in quick alarm. From overhead had come a premonitory clang! Somewhere a tackle whined and, with a sense of suffocation, both men realized that now the bars of their prison were beginning to creep up into a long slit in the stone ceiling!

Cold fingers of fear clutched Nelson's heart as the terrible allosauri, their jaws yet dripping redly, wheeled about at the familiar sound—to stand listening. Up and up crept the ponderous grille, while the allosauri commenced to shuffle forward, fixing on their next victims enormous, unblinking green eyes.

WHILE the whole loathsome cell spun about, Victor Nelson forced stiff fingers to throw off the safety catch as the nearest allosaurus opened its cavernous mouth in anticipation, displaying an array of curved teeth, as long and sharp as bayonets. Standing some fifteen feet high at the shoulder the horrible creature's body was; it all but blotted out the light. The bars rose inexorably. Now they were waist high. . . . Now above Nelson's head. . . . In a moment would come the rush.

Richard Alden stood up straight and squared his shoulders. "Good-by, Vic," he said, in clear, unaframed tones. "I don't imagine that .45 will even tickle those ghastly brutes."

Nelson nodded. "All over but the cheering," he replied with that strange, macabre humor which often comes to solace men about to die.

"See you in church." There was an equally gallant lightness to Alden's reply.

The dark haired pilot, with a curious, detached sense of unreality, stepped into the middle of the room, the automatic in his hand seeming no

more potent than a water pistol, for a ponderous, lambent eyed monster was now hopping forward. While minute particles of dust and dirt rained down from the disappearing barrier, the foremost allosaurus opened its enormous jaws, uttered an eeyf scream and charged straight at the unbarred cell.

Drawing a deep breath, Nelson raised the .45, sighted, and, remembering his former experience, fired at the enormous right eye. As in a dream, he felt the recoil. The monster neither slowed nor swerved in the least, though its great, saucer-like eye disintegrated horribly. Immediately Nelson swiftly sighted at the other eye and fired, just as the allosaurus' shadow filled the threshold.

Crack! A swirl of bitter smoke stung the aviator's staring eyes. He'd hit; he knew it!

CYCLOPEAN moments followed as the blinded monster dashed forward, missed the circular door, and, butting his head against the stone wall to the left, fell completely stunned, effectively blocking the doorway with its huge body. One enormous hind leg, fully ten feet long, and equipped with three razor-like claws, projected into the cell and lashed aimlessly back and forth, forcing the two prisoners to dodge wildly.

There ensued that indescribable kind of a moment when men go mad. Outside the cell the ravenous herd pounced upon their fallen mate and with hideous grunts and snarls promptly commenced to tear it apart. The shaken prisoners realized that the rending jaws would before long undoubtedly remove the temporary obstacle; but meanwhile the hideous hissing and the fetid stench of the allosauri breath made the cell a madhouse.

Gradually, the gigantic carcass at the door commenced to quiver and roll violently under the ferocious tugs of the eager feasters. A gap of light appeared over the huge haunches, and, all at

once, another of those terrible heads slipped over the carcass and into the cell.

Again the .45 thundered, lighting the darkened cell with a brief orange flame. A noise like the furious trumpeting of a dozen elephants nearly blew Nelson flat as the wounded monster drew back its head, but the respite promised to be short, for the other reptiles only redoubled their horrid, cannibalistic rending of the carcass. When the barrier was removed there would be a general rush which the shaken aviators could not hope to stay.

SUDDENLY, Alden uttered a low shout and pointed to the small, oval door which had, up to this point, remained securely bolted and shut. It was swinging gradually open, rimmed with a strong reddish light.

Wide-eyed, and with black hair streaming lank over his forehead, Nelson, in the act of reloading, swung about to meet this new menace. Hell! What point was there in prolonging the pitiful struggle? What was happening?

Slowly, the door swung back, and a rosy glow lit the opening, a glow that became as strong as the gleam of a spotlight. Then, slowly, a glittering, green-crested helmet of highly polished bronze appeared, and, under it, Hero Giles' familiar features, now distorted by a terrible fear. The blue eyes seemed enormous. "Quickly!" he called. "Quick or ye are lost!"

Unbelieving of the reprieve, both the aviators stared an instant at that martial figure clad in brazen armor liberally studded with enormous diamonds and emeralds, then leaped forward with the speed of desperation, for from behind came a fierce squalling from the allosauri. As he darted towards the door Nelson had a glimpse of the carcass blocking the door commencing to slip sidewise.

Alden was already out and Nelson sped through the door barely in time to escape the razor-sharp talons of the

foremost allosaurus as it scrambled into the deserted cell with a resounding bellow of disappointed fury.

CHAPTER VIII

AS the door clanged shut, drowning out the allosauri's furious screams, both aviators, shaken to the depths of their beings, could do nothing but stare about them in surprise. Completely surrounding and protecting the exit stood a double rank of hoplites in bronze armor. Like unreal automata, they remained utterly motionless, fixed in the various postures of an ancient Macedonian phalanx, their broad backs gleaming dully in the light of the neon flares. As in a dream, Nelson recognized on top of each spearsman's casque the graceful Atlantean military crest—a metal dolphin from the back of which sprouted a series of bright blue feathers, arranged like a dorsal fin.

"Thank Poseidon, ye still live!" cried Hero Giles, gripping their hands eagerly. "I had fear for ye, oh my friends."

Nelson grinned. "You cut the rescue act pretty fine, but of course we're damned grateful. And now,"—eagerly seizing the Hero's splendidly muscled arm—"in God's name tell us what's happened. Why we were arrested and—nearly made into allosauri's fodder?"

Hero Giles turned from snapping an order to a subaltern who was peering down a great, shadowy hallway with a distinctly uneasy manner.

"Much," he said. "Scarcely had ye two departed from Heliopolis than the priests, mad with rage over Altara's continued captivity, dared to seize the person of His Splendor and proclaim a regency. Herakles, the arch-priest is—"

FROM far down the gloomy, vaulted corridor came a faint sound, rather like the distant cheering of a crowd. The hoplites, standing about, turned their helmeted heads and

stared uneasily, their brazen armor glowing dully with each movement.

"I'll tell ye more later, but now—"—Hero Giles' voice took on a ringing quality like the clash of steel—"there is work to be done. To rescue ye, oh Hero Nelson, I slew the guards at the lower gate, for this prison lies in the hands of a caitiff rogue, Hero Edmund, one who clings to the priestly party. We had best be off lest we be trapped and slaughtered like rats in a pit."

Very distinctly to the ears of the aviator now came the dull clash of equipment and the tread of feet.

"Forward! We must hasten to reach the podokos waiting below," cried Hero Giles, settling his ponderous helmet more squarely on his leonine head.

At once the escort of fifteen-odd hoplites commenced to move down the corridor to the left, their hands tightly gripping the butts of their retortii pistols. At their head ran Hero Giles, and by his side Alden and Victor Nelson, who gripped his .45 vowed never again to return to that ghastly cell.

A long ringing cry from the rear brought home the dread realization that the enemy had appeared. Looking back, Nelson could see the far end of the great corridor filled with menacing figures. Then his heart leaped like a deer in a thicket, for *from ahead* sounded the clash of weapons! The rescue party's retreat was cut off!

HERO GILES acted with the speed of a veteran accustomed to emergencies. "Forward!" he roared, making the bare walls reverberate and rumble with his voice. "Halar vân! Ula Storr!"*

As by magic, there appeared before the retreating force a double rank of blue-crested hoplites who debouched from a side passage into the hall and clawed desperately for fungus bombs and retortii. Evidently they had not expected to come upon the invaders so abruptly.

* Make ready for your retortii.

"*Storr!*" Like a brazen trumpet's call, the voice of Hero Giles' rang out the order to fire—which was instantly drowned out in the furious hissing of the retortii of his followers.

Ever watchful, Nelson fired at a gigantic officer who, avoiding the first steam jets, flung back his arms to hurl one of the deadly fungus bombs among the rescuers. Shattering the bronze helmet, the American's bullet struck the Atlantean squarely between the eyes, but nevertheless the stricken officer's grenade rolled forward and burst among the hindermost of Hero Giles' followers. Instantly, the deadly green mold flung itself upon the nearest hoplites, and in a moment they crashed to the smooth granite floor, the yellowish growths already sprouting from nose, mouth and ears.

In the corridor reigned chaos, for Hero Giles' followers were now turning the full fury of their retortii upon the rank of men barring further flight. With dreadful ease, the scalding steam struck dead the opposing warriors, stripping the flesh from their bones as easily as a boy peels a banana.

Amid the swirling white clouds, Nelson had ghastly visions of yellow skulls, of steaming accoutrement, of limp heaps of disintegrating bodies; then silence fell, and, before he quite realized it, he, together with Alden and three hoplites who had survived the disastrous fungus grenade, were bounding along after Hero Giles' glittering figure as he led the way down one passage after another.

LOUDER than ever rang the fierce cry from the rear. Behind him Nelson could see dozens upon dozens of yelling pursuers, and knew that if he were to live he must run as never before.

Into a succession of spacious rooms dashed the fugitives; on through deserted armories where hundreds of bronze helmets dangled in orderly rows; and across silent barrack halls.

Closer and closer sounded the pur-

Ast. St.

suing feet, spurring the runners to an even more headlong gait.

All at once a door loomed to the right; into this darted Hero Giles and after him pounded the two Americans and three hoplites. In an instant the six men set their shoulder to the ponderous bronze door and swung it to, just as the hiss of a retortii on the other side rose above the mad, blood-hungry clamor of the momentarily baffled rebels. Gasping and sweat-bathed, the fugitives paused only an instant.

"We've gained a short passage," gasped the Atlantean wrenching off his helmet and breast plate. The veins stood out in great blue cords on his forehead, for the weight of the armor could not have been inconsiderable. "Below wait our podokos."

Nelson stripped off his leather coat, following the example of the hoplites, who swiftly divested themselves of such cumbersome equipment as could readily be removed. Then, while the shouts of the thwarted pursuers swelled like a demonic chorus, and while feathers of steam crept under the great door, Hero Giles spun about and, with his short yellow hair gleaming bright, led on down another series of passages.

ALL at once the fugitives, now reduced by exhaustion to five, found themselves on a balcony overlooking the great valley of Atlans. Before them opened an enormous staircase and down this they dashed at top speed, infinitely relieved to be once more in the open air.

Running like hunted stags, the fugitives had descended but a third of the great staircase, when, from behind, came a sudden, menacing cry that warned Nelson that the pursuers had, after going a longer way around, come once more in sight.

"Ah! Poseidon blast the traitorous Edmund and his varlets! See?" panted Hero Giles pointing to a huge arch from beneath which was issuing

V
5
3
M
A
R
3
1
XUM

a glittering column of shouting, swift running warriors at whose head dashed a splendidly-proportioned figure that must be Hero Edmund.

With the speed of the hunted, Hero Giles bounded forward, taking three and four steps at a stride, his jade green cloak snapping out behind. Down, ever downwards over the endless flight of stairs the aviators followed him, until, spent and panting, the hard pressed five plunged down a final circular staircase and so gained a courtyard where waited a detachment of armored lancers whose yellow plumes and pennons shone bright in the glare of the flame suns. Staring anxiously upwards, the troopers nevertheless stood to attention in an orderly rank beside those curious Atlantean mounts called podokos.

During all his sojourn in Atlans, Nelson had never become used to the hideous and awe-inspiring podokos which closely resembled the allosauri but were only eighteen feet long. Like the other monsters, they had tremendously developed hind legs which promised the speed now so vital for escape and safety. Ready in the tooth-studded jaws of each podoko was fitted a bronze bit together with a bridle and reins; and cinched up on each creature's back was one of those curious Atlantean saddles, which was built up at the cantle to overcome the downward slope of the podokos' spines.

Need for vital haste was but too obvious and, as he drew near, Hero Giles gasped the command to be off.

"Quick," he shouted, his scarred visage flushed and sweat-bathed. "Saddles! Speed! Speed! Cling fast as your beasts arise!"

ALL five literally hurled themselves into gorgeously caparisoned saddles. Instantly, the urging squatting podokos leaped to their feet.

It was the work of a moment for Nelson to wrench his reptile around, for already Alden and the Atlantean cavalrymen were speeding across the

wide paved court, their lance pennons fluttering bravely in the orange-hued glare.

At top speed the rescuers dashed for a great, oval gateway while the podokos increased their gait; like aeroplanes gathering speed, the faster the weird creatures traveled, the higher arose their tails.

Then, following the frightened, backward glances of the hard-riding, red-haired lancers, Nelson suddenly discovered a new and terrible cause for this headlong flight, for, issuing from an unbarred gateway, came perhaps a dozen of the terrible and enormous *allosauri*, which, spying the fleeing cavalry, instantly gave chase.

With a sense of despair, the aviators heard the ferocious bellows booming from behind and watched the appallingly swift progress of those uncouth monsters as, leaping high into the air, the allosauri covered between fifty and sixty feet at a single bound.

"They'll get you," cried an inner voice in Nelson's being. "They'll catch you sure." But the small and lithe podokos, sensing death leaping up from the rear, stretched out their slender, snake-like heads, stood on tiptoe, and, pressing their small forelegs tight against their chests, commenced to run far faster than any horse could gallop. Nevertheless, the allosauri came bounding up like colossal kangaroos, uttering weird, screaming roars that brought a chill of imminent death to the fugitives.

Casting a quick glance over his shoulder, Nelson's blood froze to find an allosaurus not more than seventy yards behind, and making terrible exertions to close that slender gap! Nearer and nearer coursed the incredible monster, body rocking in its terrific stride, dreadful jaws wide apart—jaws that could, without an effort, cut a horse in half.

AFEAR such as he had never known racked Nelson's consciousness as he found he was hinder-

most of the cavalcade, which was strung out like a field of racers. The other riders crouched low in their saddles like jockeys, lances held straight out before them, and furiously goaded their strange mounts with curious hooks. Nelson was vastly relieved to get a glimpse of Alden far in the lead, almost beside the Atlantean Prince. His podoko was evidently better than the average.

Faster and faster pursuers and pursued raced across level meadows, over straight, white roads and rolling grain fields. Wind whistled madly in Nelson's ears, filled his eyes with tears, and made his short, dark hair snap, but two huge allosauri were now not twenty yards behind and *gaining with appalling speed!*

On the verge of madness, Nelson hammered his heels into the podoko's scaly side and wished he dared let go the saddle horn to draw his pistol, but to loose his grip was to risk falling off.

Closer and closer! Two enormous nightmarish heads were actually snapping at the fleeing podoko's tail. Then fear must have inspired the reptile Nelson bestrode, for it put on a sudden desperate burst of speed which carried it past the next two lancers. In passing he glimpsed the doomed wretches, pale-faced and horrified, as they frantically goaded their failing podokos.

A moment later, piercing screams from just behind assailed Nelson's ears, but when he looked to the rear once more it was to find that a wide gap had opened between him and the great monsters behind. Evidently, the heavy-built allosauri were unable to long maintain the terrific pace set by the smaller and more agile podokos whose maximum speed Nelson judged to be well over sixty miles an hour.

THE pilot's eyes narrowed on beholding, in clear relief and not far away, the majestic, whitish outline of mighty Heliopolis, whose lofty towers, graceful domes and frowning citadels

shone pink under the leaping, blinding glare on Mount Pelion.

"We certainly picked a nice time to drop in on this God-forsaken country," grunted Alden as the walls of Heliopolis loomed near. "We seem to have crashed into the busiest days they've had in centuries. How many shots you got?"

Nelson, swaying to the steady trot of his podoko, hesitated.

"Only five. Damned if I know what's going to happen next. I suppose it all depends on Hero Giles. Looks as though the nobles were bent on restoring Altorius—if he's not dead by now."

Alden tugged powerfully at the strange bridle which controlled his beast. "The priests wouldn't dare kill him, but it surely looks like their rebellion has gained a lot of headway."

A moment Alden's clear, blue eyes swept the towering battlements, gorgeously-sculptured temples and curious stepped pyramids, which now loomed near at hand and cast their rugged outlines sharp against the copper-colored heavens.

"Maybe there's some way we can work this revolution trouble to help us," suggested Nelson, without enthusiasm. "If we could play off one crowd against the other—"

His remarks were cut short as the foremost lancers slowed before an enormous bronze gate looming ahead. On the vast main panel was a beautifully-wrought dolphin curling about a trident—symbol of the imperial power now so sorely tried. Beyond that gate, breathlessly mused Nelson, lay Heliopolis and an unknown fate.

CHAPTER IX

IT would have taken no trained eye to observe that something very unusual had happened in Atlans. Some of Heliopolis' many wide streets were quite deserted save for several small, bright-red cat-like reptiles that the Atlanteans sheltered as pets, but in other thoroughfares large throngs of people

V
5
3
M
A
R
3
1

milled uneasily about, while listening to the impassioned harangue of black-robed priests. Everywhere business was at a standstill, shops were closed and markets tenantless.

Riding at an easy hopping gallop, the aviators urged their green, scaly mounts to the side of Hero Giles, for here and there some wandering citizens, spying the Americans, would yell shrill curses and shake their fists. Reining in, Nelson demanded to know the reason for this unaccountable hostility.

"'Tis the work of our gentle and holy priests," explained Hero Giles with a hard laugh. "They have told the populace ye are magicians seeking to set other gods above Poseidon."

"Nonsense," rapped the American, looking about uneasily. "We've never given two thin damns about anything except getting back to our plane."

"So I know," was the Atlantean's preoccupied reply; "but this spawn of Herakles' temples speak loud, and the loutish populace hearkens to their lies!"

"But what the devil is all this revolt about?" broke in Alden. "Why were we arrested? You started to tell us at the prison."

HERO GILES frowned as he pulled his podoko into a gracefully carved gateway of green marble. "There's but little to add, for 'tis all very simple. The priests have laid impious hands on His Splendor, Altarius, and imprisoned him in the great temple of Poseidon. We nobles have defied the arch-priest, for the dog-conceived Jereboam already marshals his forces for a fresh attack, knowing that Atlans is sore beset by internal strife. Have patience for now we go to the council chamber, where ye shall hear everything."

To say that the newcomers found the council of nobles in a furore would be to put it mildly. Their angry voices carried far down the beautifully ornamented corridors of the Imperial Pal-

ace, which was used as headquarters.

"Sounds like a dog-fight going on in there," muttered Alden anxiously. "Don't like the sound of it a bit. I hope they feel kindly towards us."

Nelson, swinging along with his ragged shirt fluttering like a scarecrow's, nodded. "Yes, so do I. But I guess they need our help or Hero Giles wouldn't have risked his life to save us."

Conscious of the value of appearances, the dark-haired aviator unconsciously straightened his frayed black tie, buttoned the sleeves of his khaki flannel shirt and otherwise made pathetic attempts at improving his appearance as the clamor of wrangling voices grew loud down the corridor.

His wide shoulders swinging to his stride, Hero Giles flung open a door, beautifully wrought with leaping podokos, and halted on the threshold.

"Death!" rumbled a voice from inside. "I say death to the Wanderers! Let us make our peace with the priests, lest they slay His Splendor forthwith."

"And that's what I call a nice friendly greeting," was Alden's murmured comment. "Better get your gat handy, Vic. I'll bet they've got a reception committee of retortii men behind the door."

THREE was no time for Nelson to reply because now the threshold was at hand. Inside, seated at a table, he had an impression of perhaps ten or fifteen scarred and angry-looking veteran nobles whose green cloaks and bejeweled armor revealed their high rank.

In mid-dispute they halted, eyeing the three figures in the doorway with curiously conflicting expressions. Some smiled a relieved welcome, some stared in surprise, but not a few greeted the Americans with lowering brows and angry, threatening eyes.

"Harken," Hero Giles greeted them. "By Poseidon's grace the Wanderers were saved from a vile death. Rise Heroes, and bid them welcome!"

"Ah, the Wanderers!" In an instant Hero John was wringing Nelson's hand. "Oh blessed hour! I had feared for ye both. Welcome, Hero Alden!"

A faint flush crept over the young man's wan and trouble-lined face. "'Tis well ye've come," he whispered. "The council was prepared to change their intent towards ye."

A grizzled, one-eyed prince arose, and leveling an accusing forefinger at Nelson shouted, "'Tis he hath caused the rebellion. Slay him!"

"Nay!" thundered the Hero Giles, "and forget not, Hero Paul—I am senior Prince of Atlans!"

IN the great white marble council chamber silence fell, while from wonderfully carved ivory and gold chairs the harassed, yellow-bearded princes regarded the two uneasy Americans.

"Hearken, Hero Giles!" rasped another dark-browed officer in a plain, much-dented red breast plate. "I side with Paul. Away with them, I say! Time is too precious. Do not the dark hordes of Jereboam beat back our frontiers?"

Hero Giles glowered and sat bolt upright in his chair—a strange disordered figure among his gorgeously robed and armored peers. "Thou wert ever a hot-head! I prithee pause a moment! Remember how the dark-haired Wanderer once aided our imprisoned Emperor, whom Poseidon protect! Perchance, Hero Nelson and his friend once more can aid us in this, our hour of need."

A chorus of variously opined voices broke out, while Nelson with an eye to possible violence stood ready.

"Silence! Sirrah!" The fierce old

veteran banged a powerful fist on a golden dolphin head forming his chair arm. "This idle wrangling accomplishes naught, and a thousand weighty matters await our attention. Is it true the phalanxes at Tricca have risen for the priests?"

BEFORE Hero Giles could reply, a stalwart guard at the door flung it open to admit a dust and sweat-



Map of Jarmuth and Atlans

bathed courier who, darting forward, flung himself at Hero Giles' no less dusty feet. While the yellow-haired Prince started back muttering in amazement, the runner raised a shaking hand.

"Woe, woe to Atlans!" he panted. "Jarmuthian retortii men have crossed the boiling river. Cierum is fallen! Its garrison is drenched in clouds of fungus gas. But a handful escaped!"

"Speak on: is that all?" A terribly intent expression crept over the aquiline faces around the council table.

V
5
3
M
A
R
3
1
XUM

"Nay, spare thy servant!" begged the green kilted courier, raising sweaty, imploring hands. "I—I dare not—"

"Speak!" snarled Hero Giles, his blue eyes terribly lit. "Speak!—else thy carcass shall be flung to the pteranodon."

Wild-eyed, the fellow blinked fearfully about. The grim-lipped nobles edged closer. Nelson, realizing all that lay at stake, watched intently, conscious that Alden was now by his side.

"I—I, Her Sacred Holiness, Altara—" The messenger's red face twitched and he choked as in terror.

"Altara!" The name reechoed weirdly from a dozen dry throats, and Nelson saw the skin suddenly pale and tighten over Hero John's face.

"What of the divine Altara, fool?" he thundered in a dreadful, shaken monotone. "Have those foul swine of Jarmuth dared—?"

"Forgive, oh Hero!" cried the groveling courier, his long red hair sweeping the marble floor. "The dog-sired Jereboam hath made proclamation in Jezreel that the Sacred Virgin is doomed to perish on the altar of Beelzebub, their demon god, in two days' time!"

"What?" The great marble-walled chamber was shaken by an unearthly outcry as horror and rage struggled for mastery in the circle of tense faces surrounding the momentarily forgotten aviators.

Bedlam broke loose, while Hero Giles sat as though stunned, staring on the shivering runner at his feet.

Nelson, very much on the alert, could see that the announcement of Altara's impending death had produced nothing short of a cataclysm in the plans of the council.

LIKE men paralyzed by electric shocks, the yellow bearded veterans and nobles sat stupefied, frozen in their last gesture. Then, in the midst of their silent despair, came the sound of a curious, high-pitched horn that had in its note something of the

every wail of a fire siren. The effect was magical, for the nobles sprang up, hands on sword hilts and eyes searching the corridor.

"The priests!" gasped a short, broad-shouldered noble at Altorius' left. "By Poseidon! 'Tis the fanfare of the Herakles himself."

Then indeed did the council glower, for, as Nelson soon learned, Herakles was the moving spirit and evil genius of that priestly party which had dared to imprison the Emperor.

Again the horn wailed its warning of the arch-priest's approach, whereat a stalwart hoplite in green painted armor clanked in, saluted stiffly and waited for Hero Giles' instructions.

"Bid the old man enter," directed the Prince at last. "Tell the graybeard he has naught to fear if he comes alone. Otherwise, bid him return to his kennel in the temples."

A moment after the hoplite had vanished, there appeared in the doorway a tall, emaciated old man on whose silvery head was set a curious golden mitre ending in the shape of a wonderfully bejewelled trident. The curious Americans noted that the arch-priest's robes were as black as his evilly glittering eyes, and were embroidered with curious cabalistic symbols done in silver thread. In his withered hand Herakles carried a ceremonial trident—the mark of the Head Priest of Poseidon.

As though wary of advancing, the arch priest paused in the doorway, not three feet from where Nelson stood poised for action.

ALL at once the gaunt figure in black raised thin hands to the dome far overhead and cried in high-pitched prophetic tones:

"Woe to Atlans! When perishes Altara, virgin of Poseidon the God-head, then shall a darkness fall on Atlans! Her cities shall be cast down, there will be a weeping and wailing in the land, for Beelzebub and his followers shall prevail! Woe to Atlans

and woe to ye all, blasphemous nobles!"

Gripped by a superstitious awe, the generals and nobles fell into an uneasy silence, fearfully lowering their eyes and then glancing askance at the plain khaki clad figures standing alert in their corner.

Nelson, defiantly meeting their eyes, beheld Hero Giles staring fixedly before him, his powerful shoulders bowed as though bearing an overwhelming burden.

Deeper grew the silence of disaster while the American furiously searched his mind for some means of thwarting the death in store for him and his companion. By chance, a word of Hero Giles' recurred, the "pteranodons." What in the devil was a pteranodon? He turned sidewise to Alden who stood, hands in the pocket of his leather jacket, also thinking deeply.

"Dick," he whispered. "You studied paleontology at college. Do you remember what a pteranodon was?"

"A what?" The younger aviator seemed to make a definite effort to return to the present. "A pteranodon? I'm not sure, Vic, but I think it was a kind of flying reptile related to the pterodactyl group."

HE could go on no further, for Herakles, the arch-priest, raised his snowy head suddenly, his eyes blazing. "To save Atlans in her hour of trial, we demand that ye deliver to us the Wanderers. They shall die as an offering to Ares, God of War. Perchance he will preserve us." The arch-priest's deep-set and glittering eyes swept with venomous hatred the two calm-featured aviators, who looked very plain and unromantic in their flying jackets and khaki serge. "We, familiars of the Gods, herewith demand that the blasphemers perish on the War God's altar! Else shall ye all die unbeloved of the Gods!"

"And we do your bidding, will ye give us back His Splendor?" demanded Hero Giles.

"Nay—we priests do not bargain like hucksters."

Risking all, Nelson muttered a swift aside to Alden. "How big were those pteranodons?"

"Some species had a wing spread of twenty-five feet."

The muscular pilot's mouth closed into a firm, colorless line as he nodded and glanced at the vindictive old man who was by now white with fury.

Up sprang a good three-quarters of the nobles present and turned on the grim figure at the head of the board.

"Surrender the Wanderers!" they shouted. "We demand it!"

IN another instant the death sentence would have been forced on Hero Giles, but Victor Nelson leaped forward, pistol menacing the raging gray-bearded priest.

"Listen, all of you!" he shouted in deep tones that were strangely authoritative. "Beware, foolish Princes, how you threaten us. Great is our knowledge and power: you've seen that already. Even now, the other Wanderer and I can save or ruin Atlans, as we wish! Have ye forgotten the battle by Lake Copias?"

The Princes, furious at the American's defiance, half rose, hand on sword hilt, but sank back at a swift, menacing gesture from Nelson's pistol.

"What sayest thou, mad fellow?" screeched the arch-priest, his black eyes bright as knife points. "Save Atlans—?" Fierce questioning was in his sombre, sunken eyes.

"I said," repeated Nelson, "that, if we choose, we can yet save your Altara and the Emperor from death."

"Impossible! He is mad!" shouted Paul, the one-eyed Hero. "Not the Gods themselves could rescue Altara from the claws of the demon Beelzebub!" The nearest nobles flung themselves back in their chairs and snarled threats of all kinds as they gripped their sword hilts.

Sensing an inescapable climax, the khaki-clad American raised his pistol,

V
5
3
M
A
R
3
1
XUM

covering Hero Paul, the speaker. "Silence!" he rasped. "You're a thick-headed idiot not to see the truth. Can this priest save Altara? No! You know damned well he can't! And yet you'd have us killed."

"Now, Herakles," he swung on the priest, "about this Altara matter—if you'll restore Altorius unharmed, guarantee our safety, and punish those liars who condemned us to death, the other Wanderer and I will undertake to not only prevent the sacrifice of Altara, but to bring the Princess back as well!"

TO all this Alden listened with increasing and indescribable dismay, his blue eyes round as marbles. "My God!" he whispered in an undertone. "What in the devil is Vic doing? *Undertake is right, the crazy fool!*"

"How will ye accomplish this mad boast?" demanded the arch-priest in deep suspicion. "Know ye that the Sacred Virgin lies captive in the dungeons of the great temple of Beelzebub? Know ye that this temple is in the center of Jezreel, capitol of Jar-muth?"

"I had some idea that was the case."

"Know ye," continued the graybeard priest, "that Altara is ever guarded by two thousand picked priests and warriors? Know ye, moreover, that this vile sacrifice will be made but two days hence?"

The aviator's lean, dark head inclined with a serenity he far from felt.

At this point the scarred veteran officer who had spoken before broke in, his face menacing. "Believe not this liar, oh Hero Giles! He speaks with a tongue made bold by fear. He promises that which he cannot accomplish!"

Had Victor Nelson had time to reflect upon the weirdness of the plan he had evolved, he would probably have silently admitted that his grizzled accuser was more than a little justified, but as it was he smiled serenely.

From all sides rose a threatening shout. "Let the blasphemers be sacrificed. Ares will protect us!"

HIS yellow brows knit, Hero Giles wavered, but as he hesitated there ran through a great circular window a distant yet menacing shout. "Down with Altorius, the Unlucky! Down with the sons of Hudson! Give back to the ancient Gods their Sacred Virgin. Hail to Ares! Death to the Wanderers! Death! Death!"

Drowning out these ominous cries there came from below the window the brazen clang of trumpets and the clank of many armored men hurrying forward. Presently the mob's outcry grew fainter, but still the cries of "Death" could be heard.

It was a tense moment. Would Hero Giles remain friendly? With poignant anxiety, Nelson watched that dishevelled martial head sink forward in perplexity.

"Hero Giles," he warned, in a low voice. "You'd better trust us. You're risking nothing."

Slowly, the fierce blue eyes of the veteran rose, and, meeting the level gray ones of the aviator, lingered there as though asking a question. Suddenly reaching a determination, he rose to his feet and addressed the triumphantly grinning arch-priest, who tightly clutched his trident wand with thin, blue-veined fingers.

"Hearken, black crow of a priest, who has dared lay foul hands on His Splendor, the Emperor. This is my reply: show me how ye will rescue Altara; otherwise begone! My hand itches for the sword."

A DEEP silence fell while Herakles glowered helplessly, then shrewdly avoided the trap. "This is blasphemy!" he croaked and raised a quivering forefinger in solemn warning. "Woe to thee, Hero Giles. Woe to the people! Fear the wrath of the Gods!"

"Jeer not, ye nobles!" Herakles stormed on. "Be not deceived by lies! I bid thee deliver these magicians to Ares, God of War!"

A nasty moment; Nelson's heart

drummed as he gazed down at the row of uneasy, war-like faces, but Hero Giles proved the strength of his heritage. Back went his patrician head; he drew himself up to full height and stared coldly upon the black robed priest, who, nothing daunted, gave back look for look.

"Nay! We keep them: they will bear out their promise. I give ye good day, oh Holiness!"

Quivering with rage Herakles raised his withered hand in anathema. "Then perish, blind spawn of Hudson! Verily shall ye all die under the torture. Woe! Woe! Woe!"

Then, amid a strained silence, pregnant of distrust and disaster, the old man wheeled and stalked out.

As he watched the departure, color drained from the Atlantean prince's haggard features. "Ah," he observed bitterly, "ever have these black crows feasted on our land, and ever as birds of ill omen." He turned and, with a weary sigh, surveyed the group of loyal, but anxious souls. "I thank ye. Will ye still do my bidding and help to save our sovereign lord?

Out flashed the swords of a dozen-odd nobles as they raised the hoarse, ringing cry of "Altarius! Altarius! Supreme!"

ALITTLE later Nelson, before a very mistrustful gathering composed of Hero Giles, Hero John and two or three other veterans, traced the barest outline of his plan.

"You understand? I'm to be taken to the border as a prisoner; then, in plain sight of the enemy lines, the guards must maltreat me and turn me loose."

The aviator searched one after another of the brutal, war-like faces, while Hero Giles translated for the benefit of two Atlantean generals who did not speak the royal language.

"Are you positive," Alden demanded of Hero John, that this revolution in Atlans will die out if Altara is returned?"

"Yes! A thousand times yes!" The prince's fine eyes gleamed with savage enthusiasm. "With the Sacred Virgin restored to Atlans, new courage will come into the phalanxes! The priests will cease their outcries against them. Then, with the help of the blue maxima vapor, we will rend the dog-begotten followers of Jereboam limb from limb!"

"All right." Nelson's wiry khaki-clad body bent far over the table. "Remember, Hero Giles, that part of the fighting's up to you. When I'm gone, you'll do exactly what Alden tells you. Now, one thing more: what part of the border is still unquestionably loyal?"

Hero Giles frowned and shrugged his armor-clad shoulders a little helplessly beneath the splendid cloak of imperial green. "The gods alone know; but at the third division of this morning, Mayda and Thebes still vowed their loyalty. 'Tis there are quartered the phalanxes of the Imperial guards. They alone can I trust to the death."

"All right." Bending over a huge parchment map of the valley, Nelson nodded, and his keen black eyes became very serious. "I want you to concentrate every man you can muster in each of those cities. Meanwhile tell the populace,"—he drew a deep breath—"that Altara will certainly be returned to them."

"Art thou sure?" broke in the scarred veteran in the dented breast plate; then, his brow dark with doubt, he engaged Hero Giles and the rest in a heated, low-voiced colloquy.

ALDEN stepped near, an anxious frown on his unshaven features. "Think this idea of yours is sure-fire?"

"No," Nelson's lean head shook. "I'm far from sure. It's a wild gamble at best, but we can't be any worse off than we are now. If the priests win out, we're sunk and no mistake about it; but there's a fighting chance my idea could be brought off."

"Now look here," objected the younger pilot tensely. "What's this

rot about your going into Jarmuth alone? How d'you know they won't skin you alive once you're over the border?"

"I don't," admitted his friend, shrugging slightly. "But I don't see there's anything but to take the risk. If I don't go over there, sure as shooting we're going to feed some damn unpleasant kind of beast here in Atlans.

"Another thing," Nelson said, turning to the Hero who, surrounded by the others, was bent in deep consultation over a map. "How am I to know Altara if I see her? Is there a statue, a painting or something—?"

The Hero's aquiline features lit in a slow smile. "Nay, we have better than that. Come, thou shalt see the Sacred Virgin as she now is."

The members of the conference followed Hero Giles down a short corridor, through a couple of doors and into a chamber where a huge disc of crystal stood on edge fixed upon an axis above a bewildering array of wires, pipes and gauges.

HERO JOHN, who seemed familiar with the mechanism, turned a lever, whereupon the disc commenced to spin like a pie plate on a dance floor. Faster and faster it spun, silently gathering speed each second while a low humming sound filled the chamber. Gradually the outline of the whirling disk commenced to brighten, tinting the scar-seamed, craggy features of the Atlantean generals and picking glorious, glowing lights from the jewels on Hero Giles' wonderfully engraved breastplate.

"Ah." Hero John turned a small dial. "The crystal warms. Look, oh Wanderers!"

Nelson rubbed his eyes incredulously, for in the heart of the shimmering circle had materialized the outline of a room with walls of yellow marble.

"Well, I'm damned!" gasped Alden. "See how it flickers!"

As the revolving disc of crystal gained top speed, the flickering sub-

sided and a picture, clearer than most photographs, could be seen in the center. A wondrously slender, yellow-haired young girl clad in Grecian robes of pale blue sat in deep despond upon a plain wooden couch, with a black haired servant kneeling before her, apparently lacing sandals on her tiny, pink-hued feet.

"Bring closer the face," snapped Hero Giles gruffly.

Gradually the focus changed, like the close-up of a movie camera, until in the center of the madly whirling disc could be seen in minute detail and living color the face of an indescribably lovely girl.

"Whew," muttered Nelson, staring in silent amazement. "No wonder they want her back! She makes Ziegfeld's little girls look like Armenian refugees." He cast a sidewise glance, but Alden had apparently not heard him; the younger American stood gazing with rapturous joy at the girl.

"Aye! Aye!" The two veteran generals uttered stifled groans and one of them drew a hand across his eyes. "Poseidon save her! Aye! Preserve the fair Altara."

"Wouldst thou not doubly save her, now?" demanded Hero John in a low voice that bespoke his anguish. He seemed suddenly older than the grim, helmeted veterans to either side.

"You bet! I guess a man sees a face like that only once in a lifetime. And now," Nelson continued with an effort to return to the practical, "there's no time to be lost—so I'd just like to take a look at those pteranodons of yours."

A FEW minutes later, the two aviators found themselves nearing a lofty structure which adjoined the imperial palace. It was constructed along the lines of an immense aviary. Between beautiful, glistening Ionic columns of white marble, gleamed bronze bars, set at regular intervals to prevent the escape of the most appalling creatures which could ever have skimmed the air.

"What in the devil is your idea?" demanded Alden, taken aback. "God, look at the loathesome brutes!"

Some of these huge, flying reptiles were hopping awkwardly over the ground picking at bones and refuse littering the floor with long pelican-like bills, which were, however, very much thicker than those of pelicans, and set with sharp teeth at least six inches long.

"Not very pretty are they? Kind of look like huge bats," commented Nelson thoughtfully. "Wonder if they could be handled?"

"Yes, their wings are leathery. Look at 'em up yonder." Alden pointed to the roof of that immense aviary where, hanging head downwards like gigantic bats, must have been hundreds upon hundreds of the pteranodons. One of them, whistling oddly, fluttered up to the bars, affording the Wanderers an excellent view of a loathesome head, the back of which ended in a curious sort of horn, that, projecting backwards, jutted far above its rear. Fierce, vermillion eyes with green irises glared at the Americans through the bars, and great wings of greasy-looking leather fanned a disgusting stench from the interior of the aviary.

SWEET little things," was Alden's comment. "God! Imagine having one of those great things swooping down on you. Hey, Alden, look at that big devil over there! He must have a wing spread of thirty feet. Big as a Moth plane, isn't he?"

For answer the pteranodon clattered its vast beak savagely. One of the generals stooped and, catching up a huge slab of meat from a basket nearby, hurled it through the bars into the gaping jaws.

"What would ye with these creatures?" demanded Hero Giles with undisguised curiosity.

"You'd be surprised." Nelson was not deliberately rude, but his mind was wrapped up in the daring project he had evolved. "I want a couple of the

biggest of these caught and set aside in a courtyard where there will be no one looking on. If your people can train and handle podokos and allosauri—I guess a couple of Yanks ought to be able to manage these flying nightmares. So don't you worry about us."

Hero Giles uttered a grim, significant laugh. "Thou hadst best manage them. I note yonder pteranodon is in need of nourishment."

CHAPTER X

WITH sharp anxiety, Victor Nelson kept watching the towers of Jezreel rise ever clearer above the great, warm plain of Jarmuth, but, for all that, he noted how distinctly Jezreel differed from Heliopolis. The Jarmuthian capital was predominantly amber-yellow instead of white in color; its towers were flat-topped, angular, hideous structures that compared not at all favorably with the graceful Grecian architecture of Atlantean public buildings.

The populace he decided, as he strode along in the midst of half a dozen silent guards, were as harsh and graceless as their architecture. Whereas the Atlanteans had been white skinned and uniformly red haired—save for those of Hudsonian blood—the inhabitants of Jarmuth almost without exception were black haired and had dark, olive-hued skins.

"They're the lost tribes of Israel, all right," Nelson decided after a brief sojourn in that savage land lying beyond Apidanus—the great boiling river, whose bubbling and scalding currents had for centuries served as a natural boundary between the two realms. But now the Jarmuthian armies had crossed it and were steadily pushing back the demoralized and despairing Atlanteans with savage energy that heaped the dead in hillocks.

"Their armor," mused the ragged, barefoot prisoner, studying his silent guards, "looks a lot like a Roman legionnaire's, but that six pointed star on

V
5
—
3

M
A
R

3
1

XUM

their helmets is pure Semitic. Yes, this sure is an Asiatic outfit."

HIS eyes wandered from one fierce, big-nosed infantryman to another and noted the splendid physical structure of the majority. Evidently harder, much less refined and luxury-loving than the Atlanteans, these swart warriors disdained robes and other garments. Save for helmet, armor and brief black kilts, they were quite naked. Like the Atlantean hoplites the infantrymen carried spears, steam retortii and quantities of grenades.

The country side through which the prisoner passed had a holiday air, for garlands of flowers hung in every doorway, and naked, pot-bellied children squatted by the roadside, industriously weaving crowns and streamers of gay blossoms.

"Look, Atlantean dog!" commanded the black-bearded leader of the escort. "Let thine infidel eyes gaze upon the mightiest city of the world. Seest thou yonder Ziggurat which o'er towers all others?"

Nelson raised eyes red-rimmed from sleeplessness and deep anxiety—for the crafty Jarmuthians had proved unexpectedly unwilling to credit him as the Atlantean outcast and would-be renegade he had pretended to be.

"Yes," he said in reply to the English-speaking *jehar's*—captain's—question. "What's it for?"

"'Tis the temple of the almighty Beelzebub, Steam God of Jarmuth. Without his hot breath no wheel would turn, our armies would be powerless and this land would perish under the ice of the outer world." The dark eyed officer's eye fell speculatively upon his bound and dust-covered prisoner. "Perchance, dog of a spy, thou wilt die during to-day's fourth division* together with Altara, pale daughter of the feeble, false god Poseidon."

* The Atlantean day was divided into six divisions of four hours each; due to the flame suns there was no sunrise or sunset.

THIS afternoon?

Nelson could not realize that the time had flown so quickly. Four short hours separated him from the crisis of his life. A thousand doubts assailed him. What if Alden or Hero Giles failed in their share of the great scheme for rescue? Narrowly, the aviator's eye searched the great, rich plain, then swept the amber-hued sky where, far above the plain, Jilboa, the nearest flame sun, beat off the Arctic chill and darkness.

The great, black-bearded *jehar* eased the straps from which was suspended the brass coil of his retortii. "Aye," he chuckled, his thick lips parted in a crafty smile. "Ere long will the fair flesh of Altara grace the ceremonial board of His Exaltation, the King, and his priests and princes."

Nelson gasped in horror. The divinely beautiful Altara—butchered for meat like a calf? Grotesque! Ghastly! "What! You eat your prisoners?" He felt sick, nauseated.

For answer, the swart Jarmuthian raised an enormous hand and dealt the captive American a stinging cuff which made his teeth rattle.

"Peace!" he snarled. "Else I slit thy spying throat ere we pass yonder walls."

Fingering a short blue-black beard that was frizzed into tight curls in the Assyrian manner, the *jehar* lengthened his stride as the little detachment clanked into the shadow of a great wall surrounding Jezreel, and through a huge gate guarded by two hideous, jackal-headed effigies.

Hurrying into the city were throngs of eager men, women and children, interspersed with muscular, black bearded soldiers who cast threatening, baleful eyes on the pale-skinned prisoner.

AT first the great metropolis of Jezreel seemed boundless, for everywhere arose tall, massive monuments of yellow marble whose facades were engraved with Sanskrit charac-

ters, thus bearing out Nelson's surmise that this was indeed a race of Semitic origin.

Here and there hurried grey-bearded, vulture-eyed priests oddly garbed in corrupt Occhive and Tyrian regalia. Nelson found it odd to see the Tablet of the Laws, which Jarmuth so openly ignored, swaying on their yellow robed breasts; and none cried out more menacingly nor more loudly against the limping, wan-faced captive, than these same ecclesiastics, who must have long since forgotten all worship of Jehovah in the foul service of a bestial golden effigy.

A stone sailed through the air, narrowly missing the American; then another, which struck his shoulder.

"God, what a rough looking crowd," thought Nelson, as the guards, cursing, held back the screaming mob. "At this rate I won't live to even reach the temple!"

Every second his life stood in great danger. Unkempt, sloe-eyed women hurled themselves, shrieking with fury, against the armored chests of the guards, who were hard pressed to beat them off with their spear hafts.

Nelson's one small ray of comfort in this evil hour was the fact that his .45 pistol remained untouched in a food wallet. At the border the jehar had cast one contemptuous glance at the weapon, but, no doubt deeming it some strange culinary tool, he had made no effort to remove it.

It was a continual struggle for the guards to win their way up a long flight of stairs, for ever the great stream of humanity grew denser and more menacing.

NELSON felt a violent sense of revolt grip his being. "I must win free," he thought. "If I fail, Allden dies, and—and—" For the first time he realized how much he wanted to actually see Altara. Like a clear cameo, an image of her had remained fresh in his memory. Except for her Grecian garments she might have been

a lovely, carefree English or American girl.

"And these decadent swine would sacrifice her!" The thought was sickening. Yet how could he prevent the pitiful tragedy?

Fortunately, a detachment of troops —tall, sinewy fellows with conical helmets, crested with six-pointed stars—reinforced the guards just as clawing hands began to snatch and tug at the prisoner's ragged Atlantean chiton of blue cotton.

Almost before he realized it, Nelson was dragged inside a great gloomy building and into a circular chamber where four eagle-featured elders sat in council beneath the six-pointed star of Sem. On approaching, the jehar in command sank on one knee and in humble salute raised both hands to the tribunal.

"A tough looking desk sergeant they've got," muttered the prisoner to himself as his eye met the chilling regard of a lean, yellow-faced priest. "Wonder what I'm booked for?" Idiotically, he recalled being summoned before a traffic court, years back. "Guess I don't get off with vagrancy; it'll probably be everything from speeding to mayhem, with maybe arson and well-poisoning thrown in."

The deliberations of this ominous court proved to be appallingly short. The four-faced elders merely put their heads together, muttered a few sentences, then straightened up almost immediately. The chief priest—he with the yellow face—thrust out his fist and made the immemorial signal of death by jerking his thumb at the black marble floor.

BEFORE the outraged and astounded aviator could utter a word of protest, powerful guards seized and haled him off down a dark, narrow passageway in which the fetid prison smell was very strong. Too wise to struggle against overwhelming odds, yet appalled at the thought of his impending doom, Nelson was dragged

V
5
3
M
A
R
3
1
XUM

into a room where four or five furtive, enslaved Atlanteans, made dumb by the removal of their tongues, were engaged in a curious occupation.

On a bare stone bench, five other Atlantean captives were sitting in miserable silence. They made a grotesque array, for their heads were crowned with gay yellow and blue flowers, and the upper half of their perfectly formed bodies gleamed with an application of a sweet-smelling oil. About their wrists and waists were twined fragrant garlands of yellow roses which hid the leather straps confining their hands.

Struggling, Nelson was forced on to the bench, whereupon slaves, skipping to avoid the lash of a scarred, olive-hued slave driver, hurried to wash the newly arrived prisoner's limbs, face and hands. A weary-looking old slave with sunken, rheumy eyes listlessly pulled the blue chiton from Nelson's broad shoulders, and would have removed the food pouch had not the prisoner winked vigorously. The ministering slave glanced swiftly sidewise and, discovering the slave driver's attention directed to another corner, pulled the upper folds of the chiton over the food pouch and its precious contents, then set a crown of yellow roses more or less askew on the American's head. For all the peril of the situation Nelson could not suppress a fleeting smile as the phrase, "For I'm to be Queen of the May, Mother," leaped nonsensically into his brain.

YES, I guess they are getting us all dolled up for a sacrifice of some kind." Nelson's heart began to pound at the thought. Then he fought for self control. It *must* be a hideously realistic nightmare! He, Victor Nelson, American citizen, a quiet birdman, member of the Caterpillar Club and ex-flight commander of the A. E. F. was about to be offered as a sacrifice to some hideous, pagan god? Nonsense! He'd wake up in a minute and hear the drone of a ship on the line.

He blinked, staring fixedly at a single ray of light that came streaming in through a small, barred window, then glanced sidewise at his fellow victims, who with Spartan indifference sat waiting for the end of all things. It was no dream!

From the tiny window came the shrill discordant braying of many trumpets, and a roar like that of a football crowd arose surprisingly near. In response, the slave driver lashed the gaudily bedecked sacrificial victims to their feet with vicious cuts of his pliant whip, and herded them like a drove of calves down a very long passage, lit at intervals by those strange column lamps of incandescent gas. In their red glare the doomed six seemed as though already bathed in blood.

"Must be some crowd of people outside," muttered Nelson as a great gale of sound deafened him. Yonder the amber glare of the flame suns glimmered, and now it was his turn to step into the open!

ON a sort of spiral roadway he paused, breathless, awed, bewildered, for there, eddying restlessly about the bases of towers and other huge structures, was a great sea of upturned faces. To his surprise he found the passage he had followed opened perhaps halfway up what must be the great Ziggurat of Beelzebub. He judged the tower's height must be immense, for already the crowd was a good hundred feet below.

"*Zarotoa! Zaratoa! ü Wlanka!*"*

Nelson shivered. How terrible was the wild, bloodthirsty clamor of that vast throng, when they beheld the six flower-decked prisoners appear upon the circular winding road which led to the lofty and wind-swept summit of the great conical pyramid of the people of Jezreel.

Behind the victims marched perhaps eighteen or twenty spearmen gorgeously uniformed in yellow and black

* Death to the victims!

painted armor. Their retortii were plated with gold, and in the center of a star forming the crest of each helmet was set a diamond large as a hickory nut.

Preceding the despairing prisoners marched a squad of tall, clean-shaven priests with great gold hoops in their ears. They blew mightily upon long, curved horns, and were followed by perhaps a dozen lithe, posturing girls, half clothed in diaphanous yellow robes. These priestesses swung golden censers which flung bluish clouds of aromatic smoke high into the humid air above.

Up and up, around and around the great tower temple, Nelson was dragged, while the vast city of Jezreel, palaces, towers, courts, dwellings and all, lay like a great panorama below. Up and up, and the wind grew stronger while Nelson marvelled at the great height of the structure he was mounting. Immediately in front of him swayed the naked shoulders of the three captive Atlanteans; he could see rose petals from their crowns fluttering in the strong warm breeze sweeping that man-made pinnacle for the worship of a heathen god.

Despairingly, the American's eyes searched the horizon, to discover nothing but a few great birds wheeling lazily in the bronze-hued sky. Very clearly he could discern three of the flame suns, casting flame high from their peaks.

"Alden!" he groaned. "Oh God, Alden, don't fail me!"

Chilled by the fate in store, he scanned the dark and hostile faces below, but found no friendly visage.

Up and up. The procession was now nearing the summit.

There were hosts of poignant problems before him, each vital if Altara and the Empire of Atlans were to be saved; but one primary question immediately confronted him. How could he get his hands free? He ventured a few words in English to the stolid

Atlantean at his side, whereat the fellow only stared dully and shook his red, flower-crowned head.

He next tried to cautiously work loose his hands, but to no avail. The rope of plaited skin binding his aching wrists together was tough as any rawhide. Cursing, he abandoned the effort, and, as his eyes once more swept the great bloodthirsty throng below, he felt himself doomed indeed.

CHAPTER XI

STANDING at last on the summit of the great Ziggurat, Nelson found himself staring up at the fearsome golden image of the dread demon Beelzebub. The god stood some twelve feet in height and had a hideous human face, but, in place of hair and beard, countless golden tubes writhed in all directions. From the end of one, the puzzled prisoner beheld several tiny feathers of steam creeping forth, indicating that these hairs were a species of steam vent.

When, with the other captives, he was made to halt near its base, he further discovered that the idol sat upon a throne of yellow marble, the sides of which were carved with Sanskrit characters, necessarily quite meaningless to the doomed aviator.

In a grim and silent rank before Beelzebub's feet, stood some six or eight priest-executioners bending their black-robed bodies against the strong wind which swept that ghastly pinnacle.

Just below the base of the image, Nelson noted several great, copper coils, no doubt conducting steam from the interior of the Ziggurat. Between the knees of Beelzebub rested a huge, shallow bowl, the use of which puzzled the American not a little, for he saw that the base of this ornate receptacle was also wrapped with a number of steam coils. Two great hands, ending in cruel-looking claws, were stretched horizontally above the demon's knees, seeming to plead for victims.

V
5
—
3

M
A
R

3
1

XUM

SUDDENLY a deep toned brazen gong sounded somewhere below; the trumpeters blew an ear-piercing note; and, at a gesture from the high priest, four of the brawny executioner-priests leaped forward, seized one of the Atlantean victims, hurled him to the stone platform and, in an unbelievably short interval, strapped the shrieking wretch by wrists, elbows, knees and ankles to a long, brass rod. Slung like a dead deer from a rail, they lifted the helpless Atlantean, and, while five hundred thousand voices roared in acclaim the priests fitted the pole ends into notches above the hands of the idol with the effect that the idol actually seemed to be clutching its victim.

Then, from all the pipes composing the hair and beard of Beelzebub, sprang forth hissing spouts of snowy steam which, whipped by the rising wind, went whirling madly down the lee of the Ziggurat. At the same time, from the half open mouth of the demon issued a fearful, screaming howl, a thousand times louder than the whistle of a speeding locomotive. Deafening and barbaric, it was reechoed from a hundred towers and battlements.

A dreadful, exultant yell burst from the multitude below as the red-robed priest drew from beneath his garments a sickle-shaped knife that glittered evilly in the light of the flaming suns. Still chanting, he stooped and quickly made a deep incision over the heart of the victim. While a piercing, agonized shriek burst from the ashen lips of the doomed Atlantean, his bright life-blood began to splash into the golden bowl below where, due to the presence of the steam coils, it swiftly commenced to hiss and bubble. Very quickly the last scarlet drops had fallen.

Then while Nelson, sick and horrified, stood watching, the dead body on its pole was taken down, unstrapped, and hurled, limp and red-spattered, to the next lower platform where other priests waited to dismember it for the

ceremonial cannibalism soon to follow.

IN rapid succession two more victims were slaughtered amid the blood-hungry cheers of the Jarmuthean populace. Now the great bowl hissed and bubbled with a generous supply of the dark red fluid, from which rose clouds of evil-smelling steam that fanned the hideous features above.

From below suddenly arose an excited shout far mightier than any which had preceded it, when the executioners, sweating from their exertions, now turned and, spying Nelson, hurried forward. Coincidentally, the American's bound hands disappeared beneath the chiton. Squaring his shoulders, he gripped the pistol, prepared to make a good end.

"They'll get me, but before I die I'll send at least two or three of these devils to hell," he thought. "Come on—"

But, for an inexplicable reason, the arch-priest beckoned back his satellites, while roar upon roar of terrific excitement swelled from the swarming mob below, and a shout which at last became distinguishable bid fair to split the heavens. "Altara! Altara! Altara!"

Slowly, the temporarily reprimed victim's muscles stiffened. He understood. The next victim was to be the fair Altara, sister of Altorius and Sacred Virgin of Atlans.

"Altara! Altara!" A rising hurricane of impassioned human voices thundered the name.

Suddenly, the desire to live burned doubly strong in the American's breast. He must somehow prevent this inhuman catastrophe. But how? How?

Stealing a quick glance over his shoulder, Nelson stifled a groan. The southern horizon remained clear, and put an end to hope. No help! He must fight it out to the end alone.

ARANK of exultant, black-bearded priests now appeared at the head of the stairway, then a quartet of olive skinned, semi-naked priestesses joyfully clashing brass cymbals. |

There came an interval—and Nelson's heart stood still as there appeared the lovely head and shoulders of her whom he had first seen in the heart of the revolving crystal. Even more fiercely, mad revolt at fate gripped him.

Through hot, strained eyes the American saw that the stately Altara was beautiful beyond all possible comparison, and that she seemed utterly unafraid in the hour of her dreadful death. The Atlantean maiden's large, clear blue eyes were fixed with calm resignation on the distant flame sun of Jilboa. On her curling golden hair had been set a circlet of ceremonial yellow roses, while her white, slender body was thinly covered with a scanty robe of yellow silk.

Slowly, and moving her small bare feet in a regal stride, Altara climbed the last few steps and stood straight and unafraid before the hideous demon god of Jarmuth.

Thousands of frantic inner voices assailed the aviator's consciousness. "Save her! You must save her! She's too young, too beautiful to die!"

Like a vast maelstrom of sound, so swelled the lustful cry of the dark multitude at the base of the Ziggurat, while the arch-priest chanted his litany in a sort of triumphant exultation. Then, all at once, one of the executioners roughly tripped the golden haired girl, sprawling her helpless on the bloody stones; and, before Nelson could quite realize it, the slender, silver hued form lay limp and helpless between Beelzebub's bloody claws.

LIKE a dynamo furiously gathering speed, so buzzed Nelson's brain. He was going to save her—if only for a brief interval! One man against a nation. Through a raging mist of fury he saw the red-robed priest raise his lean arms; then the American's bound hands darted beneath the blue chiton to reappear immediately. No one saw the pistol, for every eye was riveted upon the gleam-

ing, sickle-knife of the red priest. Like a voice from hell, that every scream burst again from Beelzebub's throat as his priest stepped near, the knife raised.

Amid a deafening roar the sickle-knife flashed higher; but it never fell, for the red priest suddenly reeled, clutched his chest and, staring wildly, staggered sidewise, while the assembled priests stared thunderstruck. The deafening roar of Beelzebub, the clamor of horns and cymbals had drowned out the report. In superstitious awe the Jarmuthians leaped back, panic-stricken, from the convulsively writhing body of the red priest, which rolled crazily down the steps before the idol; but a high shout of terror rang out as he toppled off the summit and, like a discarded puppet, plunged down the precipitous side of the cone-like tower.

Again Nelson's pistol spat, and two of the executioners collapsed in kicking agony. Like an avenging fury, the American raged about the summit, the pistol in his bound hands dealing death right and left until panic seized the remaining priests, who, with one accord, abandoned their weapons to rush headlong down the dizzy, winding roadway. In a trice, none but Altara, Nelson, the two Atlanteans and the fallen priests remained on the summit.

IT was the work of a moment for the Atlanteans to cast loose Nelson's bound wrists, and he theirs; time was precious, for, from below, a furious cohort of spearmen were charging up the stairs, their dark features terrible in their wrath.

"Only four more shots!" The sickening realization flashed into Nelson's brain. "That'll never stop them." Then in the midst of his despair he saw an answer. Stepping back he fired twice full into the great steam coil circling the base of the idol.

Spang! Spang! His bullets smacked through the copper coil to puncture neat, round holes. As he fervently hoped, jets of live steam rushed

V
5
3
M
A
R
3
1

through these vents with terrible force and bathed the head of the stairs with a scalding, blinding vapor. Howling like mad beasts, the agonized Jarmuthian hoplites fell back, while overhead Beelzebub bellowed incessantly, shaking the sky with his hideous voice.

"That's better." But Nelson knew his triumph to be brief. "*Where in hell is Alden?*" he raged as with shaking hands he released the bewildered girl from the death bar after the two Atlanteans had lifted it and its fair burden from the claws of Beelzebub.

Picking up the swords and other weapons of the fallen priests the two Atlanteans uttered their deep-toned war cry of *Halor vàn!* and joyously prepared to die fighting, as furious roar on roar of wrath arose from the populace, infuriated at being cheated of their prey. But the black-armored temple guards dared not charge those twin steam jets barring their approach. Accordingly they tried other means.

NELSON'S heart stopped as a small, dark object sailed up from below and clattered on the platform. It was a grenade. With the speed of thought, the American kicked it to the landing below, where it exploded, annihilating a detachment of Jarmuthians by drenching them with the terrible fungus gas. Heart bounding with savage joy, Nelson watched the deadly green fog leap from the broken grenade and of its own accord settle on the nearest soldiers. With the usual astonishing speed there formed on the stricken soldiery that poisonous yellow mould, whose fungus-like shoots sprouted through nostrils and mouths. On the dense crowd below the bomb's effect was appalling, and no more grenades were hurled. . . .

During the respite Nelson's anguished eyes once more swept the skies. He started. Was it true or was it a mirage? Far to the southward a small, black speck materialized in the orange-hued heavens. Good old Alden! Hope wavered in the American's

breast. Could he and his two fellows beat off the infuriated Jarmuthians long enough? He doubted it.

A shower of spears sailed up, but because of the angle, their trajectory was too great, and like rays of death the lances flashed harmlessly overhead to plunge over the summit and wreak death among those on the other side.

Nearer and nearer came the black speck while from the populace a low shout of amazement arose. Coincidentally Nelson's heart stopped: aghast, he saw that the steam was no longer hissing from the holes at the idol's feet! Evidently, the steam current had been shut off from below to allow the raging priests to lead their followers in a desperate charge up the stairs.

Marshalling an Atlantean to either side, Nelson sprang to the head of the stair and fired full in the face of gorgeously robed priests who staggered back screaming. But the others wavered only an instant.

"*Halor vàn!*" Both Atlanteans hurled spears retrieved from the abandoned weapons—and each struck down his man.

THE American's eye flickered up. Yes, there came a strange, but welcome sight: a great creature with enormous, leathery pinions was circling down towards the tower top! A clashing of weapons brought Nelson's eyes earthwards. He joined in a furious mêlée at the stair top, like the Atlanteans, using a captured bronze sword. There came a deep groan as the right-hand Atlantean collapsed with a bloodied bronze spear point standing far out from between his naked shoulder blades.

A swooping shadow fell across the slowly advancing attackers. Beholding that awesome creature the Jarmuthians cowered, hesitated; then in headlong panic they darted below, uttering howls of fear and pursued by the surviving Atlantean, who, gone beserk, must have shortly paid for his folly.

The pteranodon was now quite recognizable, and seated on a double saddle was Alden, skillfully guiding the ungainly monster by means of a curious bridle, by shifting his weight and by pressing certain nerve centers between the great reptile's leathery shoulders.

Down, down circled Alden until the great wings skimmed just above Beelzebub's ugly golden head.

Her courage strained beyond endurance, Altara screamed shrilly in fear as Alden guided the huge reptile to the summit and forced it to light.

"Quick!" shouted Alden. "They're coming back up!"

"All right!" Catching up the fainting girl, Nelson hurried two or three fallen bodies, and, while Alden showered fungus bombs upon the returning Jarmuthians, he laid his precious burden across the saddle and secured her with straps specially designed for the purpose.

"All right, Dick," he snapped. "Get going!"

"But you?" Alden's brown face was terribly intent.

"I'm not going! This creature could never carry the three of us. It can't, I tell you! Hurry, those devils are coming!"

Alden folded his arms. "If you don't go, I don't."

"All right then," snarled Nelson, vaulting into the saddle after casting loose the inert, yellow-robed girl. "Be a damned fool! We'll all die now."

IT was a near thing, for the pteranodon, scenting the fresh blood, was very loath to obey its master, and scuffed awkwardly around the tower top two or three times, while Nelson, clutching Altara to him, expended his last shot in driving back the enemy.

At last, the pteranodon spread its huge brown pinions and took off. Then Nelson gasped in alarm, for, unaccustomed to the heavy weight it now bore, the pteranodon scaled earthwards with the speed of a meteor, wildly flapping

its bat-like wings. Down! Down! Nelson had an impression of people scattering like frightened ants.

Alden cursed, tugged furiously on the bridle, and set his weight back in the saddle, but to no avail. Down! Ever down! The pteranodon now struggled among the tall buildings.

A sickening sense of defeat gripped Nelson as a long jet of steam shot out from a huge brass retortii mounted on the roof of an arsenal. The scalding fingers of steam just missed its target, but fortunately served to sting the descending pteranodon. With a convulsive shudder and a whistling scream, the hideous reptile commenced to flap its gigantic wings faster, and, slowly but surely, began to rise over the yellow temples and towers of the barbarous city of Jezreel.

WHAT followed is now a matter of Atlantean history. On its pages is set forth in full detail how the giant pteranodon barely crossed the boiling river to sink exhausted in the outskirts of Tricca.

There, also, is described the series of tremendous battles in which the Atlanteans, led by Altarius and inspired by the return of their Sacred Virgin, employed the terrible fungus gas to overwhelm the Jarmuthian invaders, driving them back with great slaughter to the steaming plains of their own land.

At even greater length is described the great triumph Altarius accorded the victorious aviators on the occasion of Victor Nelson's marriage to Altara.

"Doth it not seem strange," she whispered as they stood looking out over the great, sleeping city of Heliopolis, "that thou of the New World and I of the Lost World, should stand man and wife?"

The American's tanned face softened. "My darling," he whispered, "there are lots of strange things in the new Atlantis—but this isn't one of them."

(The End.)



She seemed to scream, though we could hear nothing.

The Meteor Girl

By Jack Williamson

WHAT'S the good in Einstein, anyhow?"

I shot the question at lean young Charlie King.

In a moment he looked up at me; I thought there was pain in the

back of his clear brown eyes. Lips closed in a thin white line across his wind-tanned face; nervously he tapped his pipe on the metal cowling of the *Golden Gull's* cockpit.

"I know that space is curved,

Through the complicated space-time of the fourth dimension goes Charlie King in an attempt to rescue the Meteor Girl.

that there is really no space or time, but only space-time, that electricity and gravitation and magnetism are all the same. But how is that going to pay my grocery bill—or yours?"

"That's what Virginia wants to know."

"Virginia Randall!" I was astonished. "Why, I thought—"

"I know. We've been engaged a year. But she's called it off."

Charlie looked into my eyes for a long minute, his lips still compressed. We were leaning on the freshly painted, streamline fuselage of the *Golden Gull*, as neat a little amphibian monoplane as ever made three hundred miles an hour. She stood on the glistening white sand of our private landing field on the eastern Florida coast. Below us the green Atlantic was running in white foam on the rocks.

In the year that Charlie King and I had been out of the Institute of Technology, we had built the nucleus of a commercial airplane business. We had designed and built here in our own shops several very successful seaplanes and amphibians. Charlie's brilliant mathematical mind was of the greatest aid, except when he was too far lost in his abstruse speculations to descend to things commercial. Mathematics is painful enough to me when it is used in calculating the camber of an airplane wing. And pure mathematics, such as the theories of relativity and equivalence, I simply abhor.

I was amazed. Virginia Randall was a girl trim and beautiful as our shining *Golden Gull*. I had thought them devotedly in love, and had been looking forward to the wedding.

"But it isn't two weeks since Virginia was out here! You took her up in our *Western Gull IV*!"

NERVOUSLY Charlie lit his pipe, drew quickly on it. His face, lean and drawn beneath the flying goggles pushed up on his forehead, sought mine anxiously.

"I know. I drove her back to the

station. That was when—when we quarreled."

"But why? About Einstein? That's silly."

"She wanted me to give it up here, and go in with her father in his Wall Street brokerage business. The old gent is willing to take me, and make a business man of me."

"Why, I couldn't run the business without you, Charlie!"

"We talked about that, Hammond. I don't really do much of the work. Just play around with the mathematics, and leave the models and blueprints to you."

"Oh, Charlie, that's not quite—"

"It's the truth, right enough," he said, bitterly. "You design aircraft, and I play with Einstein. And as you say, a fellow can't eat equations."

"I'd hate to see you go."

"And I'd hate to give up you, and our business, and the math. Really no need of it. My tastes are simple enough. And old 'Iron-clad' Randall has made all one family needs. Virginia's not exactly a pauper, herself. Two or three millions, I think."

"And where did Virginia go?"

"She took the *Valhalla* yesterday at San Francisco. Going to join her father at Panama. He cruises about the world in his steam yacht, you know, and runs Wall Street by radio. I was to telegraph her if I'd changed my mind. I decided to stick to you, Hammond. I telegraphed a corsage of orchids, and sent her the message, 'Einstein forever!'"

"If I know Virginia, those were not very politic words."

"Well, a man—"

HIS words were cut short by a very unusual incident.

A thin, high scream came suddenly from above our neat stuccoed hangars at the edge of the white field. I looked up quickly, to catch a glimpse of a bright object hurtling through the air above our heads. The bellowing scream ended abruptly in a thunderous crash.

V
5
3
M
A
R
3
1
XUM

I felt a tremor of the ground underfoot.

"What—" I ejaculated.

"Look!" cried Charlie.

He pointed. I looked over the gleaming metal wing of the *Golden Gull*, to see a huge cloud of white sand rising like a fountain at the farther side of the level field. Deliberately the column of debris rose, spread, rained down, leaving a gaping crater in the earth.

"Something fell?"

"It sounded like a shell from a big gun, except that it didn't explode. Let's get over and see!"

We ran to where the thing had struck, three hundred yards across the field. We found a great funnel-shaped pit torn in the naked earth. It was a dozen yards across, fifteen feet deep, and surrounded with a powdery ring of white sand and pulverized rock.

"Something like a shell-hole," I observed.

"I've got it!" Charlie cried. "It was a meteor!"

"A meteor? So big?"

"Yes. Lucky for us it was no bigger. If it had been like the one that fell in Siberia a few years ago, or the one that made the Winslow crater in Arizona—we wouldn't have been talking about it. Probably we have a chunk of nickel-iron alloy here."

"I'll get some of the men out here with digging tools, and we'll see what we can find."

Our mechanics were already hurrying across the field. I shouted at them to bring picks and shovels. In a few minutes five of us were at work throwing sand and shattered rock out of the pit.

SUDDENLY I noticed a curious thing. A pale bluish mist hung in the bottom of the pit. It was easily transparent, no denser than tobacco smoke. Passing my spade through it did not seem to disturb it in the least.

I rubbed my eyes doubtfully, said to Charlie, "Do you see a sort of blue haze in the pit?"

He peered. "No. No.... Yes. Yes, I do! Funny thing. Kind of a blue fog. And the tools cut right through it without moving it! Queer! Must have something to do with the meteor!" He was very excited.

We dug more eagerly. An hour later we had opened the hole to a depth of twenty feet. Our shovels were clanging on the gray iron of the rock from space. The mist had grown thicker as the excavation deepened; we looked at the stone through a screen of motionless blue fog.

We had found the meteor. There were several queer things about it. The first man who touched it—a big Swede mechanic named Olson—was knocked cold as if by a nasty jolt of electricity. It took half an hour to bring him to consciousness.

As fast as the rugged iron side of the meteorite was uncovered, a white crust of frost formed over it.

"It was as cold as outer space, nearly at the absolute zero," Charlie explained. "And it was heated only superficially during its quick passage through the air. But how it comes to be charged with electricity—I can't say."

He hurried up to his laboratory behind the hangars, where he had equipment ranging from an astronomical telescope to a delicate seismograph. He brought back as much electrical equipment as he could carry. He had me touch an insulated wire to the frost-covered stone from space, while he put the other end to one post of a galvanometer.

I think he got a current that wrecked the instrument. At any rate, he grew very much excited.

"Something queer about that stone!" he cried. "This is the chance of a lifetime! I don't know that a meteor has ever been scientifically examined so soon after falling."

HE hurried us all across to the laboratory. We came back with a truck load of coils and tubes and bat-

teries and potentiometers and other assorted equipment. He had men with heavy rubber gloves lift the frost-covered stone to a packing box on a bench. The thing was irregular in shape, about a foot long; it must have weighed two hundred pounds. He sent a man racing on a motorcycle to the drug store to get dry ice (solidified carbon dioxide) to keep the iron stone at its low temperature.

In a few hours he had a complete laboratory set up around the meteorite. He worked feverishly in the hot sunshine, reading the various instruments he had set up, and arranging more. He contrived to keep the stone cold by packing it in a box of dry ice.

The mechanics stopped for dinner, and I tried to get him to take time to eat.

"No, Hammond," he said. "This is something big! We were talking about Einstein. This rock seems energized with a new kind of force: all meteors are probably the same way, when they first plunge out of space. I think this will be to relativity what the falling apple is to gravity. This is a big thing."

He looked up at me, brown eyes flashing.

"This is my chance to make a name, Hammond. If I do something big enough—Virginia might reconsider her opinion."

Charlie worked steadily through the long hot afternoon. I spent most of the time helping him, or gazing in fascination at the curious haze of luminous blue mist that clung like a sphere of azure fog about the meteoric stone. I did not completely understand what he did; the reader who wants the details may consult the monograph he is preparing for the scientific press.

He had the men string up a line from our direct current generator in the shops, to supply power for his electrical instruments. He mounted a powerful electromagnet just below the meteorite, and set up an X-ray tube to bombard it with rays.

NIGHT came, and the fire of the white sun faded from the sky. In the darkness, the curious haze about the stone became luminescent, distinct, a dim, motionless sphere of blue light. I fancied that I saw grotesque shapes flashing through it. A ball of blue fire, shimmering and ghost-like, shrouded the instruments.

Charlie's induction coil buzzed wickedly, with purple fire playing about the terminals. The X-ray tube flickered with a greenish glow. He manipulated the rheostat that controlled the current through the electromagnet, and continued to read his instruments.

"Look at that!" he cried.

The bluish haze about the stone grew brighter; it became a ball of sapphire flame, five feet thick, bright and motionless. A great sphere of shimmering azure fire! Wisps of pale, sparkling bluish mist ringed it. The stone in its box, the X-ray bulb and other apparatus were hidden. The end of the table stuck oddly from the ball of light.

I heard Charlie move a switch. The hum of the coils changed a note.

The ball of blue fire vanished abruptly. It became a hole, a window in space!

Through it, we saw another world!

The darkness of the night hung about us. Where the ball had been was a circle of misty blue flame, five feet across. Through that circle I could see a vast expanse of blue ocean, running in high, white-capped rollers, beneath a sky overcast with low gray clouds.

It was no flat picture like a movie screen. The scene had vast depth; I knew that we were really looking over an infinite expanse of stormy ocean. It was all perfectly clear, distinct, real!

A STOUNDED, I turned to find Charlie standing back and looking into the ring of blue fire, with a curious mixture of surprise and delighted satisfaction.

"What—what—" I gasped.

"It's amazing! Wonderful! More than I had dared hope for! The com-

V
5
—
3

M
A
R
3
1

XUM

plete vindication of my theory! If Virginia cares for scientific reputation—"

"But what is it?"

"It's hard to explain without mathematical language. You might say that we are looking through a hole in space. The new force in the meteorite, amplified by the X-rays and the magnetic field, is causing a distortion of space-time coordinates. You know that a gravitational field bends light; the light of a star is deflected in passing the sun. The field of this meteorite bends light through space-time, through the four-dimensional continuum. That scrap of ocean we can see may be on the other side of the earth."

I walked around the circle of luminous smoke with the marvelous picture in the center. It seemed that the window swung with me. I surveyed the whole angry surface of that slate-gray, storm-beaten sea, to the misty horizon. Nowhere was it broken by land or ship.

Charlie fell to adjusting his rheostat and switches.

It seemed that the gray ocean moved swiftly beyond the window. Vast stretches of it raced below our eyes. Faint black stains of steamer smoke appeared against the blue-gray horizon and swept past. Then land appeared—a long, green-gray line. We had a flash of a long coast that unreeled in endless panorama before us. It was such a view as one might get from a swift airplane—a plane flying thousands of miles per hour.

The Golden Gate flashed before us, with the familiar skyline of San Francisco rising on the hills behind it.

"San Francisco!" Charlie cried. "This is the Pacific we've been seeing. Let's find the *Valhalla*. We might be able to see Virginia!"

THE coast-line vanished as he manipulated his instruments. Staring into the circle of shining blue mist, I saw the endless ocean racing below us again. We picked up a pleasure yacht, running under bare poles.

"I didn't know there was such a storm on," Charlie murmured.

Other vessels swam past below us, laboring against heavy seas.

Then we looked upon an ocean whipped into mighty white-crowned waves. Rain beat down in sheets from low dense clouds; vivid violet lightnings flashed before us. It seemed very strange to see such lightning and hear not the faintest whisper of thunder—but no sound came from anything we saw through the blue-rimmed window in space.

"I hope the *Valhalla* isn't in weather like this!" cried Charlie.

In a few minutes a dark form loomed through the wind-riven mist. Swiftly it swam nearer; became a black ship.

"Only a tramp," Charlie said, breathing a sigh of relief.

It was a dingy tramp steamer, her superstructure wrecked. Her fires seemed dead. She lay across the wind, rolling sluggishly, threatening to sink with every monstrous wave. We saw no living person aboard her; she seemed a sinking derelict. We made out the name *Roma* on her side.

Charlie moved his dials again.

In a few minutes the slender prow of another great steamer came through the sheets of rain. It was evidently a passenger vessel. She seemed limping along, half wrecked, with mighty waves breaking over her rail.

Charlie grew white with alarm. "The *Valhalla*!" he gasped. "And she's headed straight for that wreck!"

In a moment, as he brought the liner closer below our blue-rimmed window, I, too, made out the name. The wet, glistening decks were almost deserted. Here and there a man struggled futilely against the force of the storm.

IN a few minutes the drifting wreck of the *Roma* came into our view, dead ahead of the limping liner. Through the mist and falling rain, the derelict could not have been in sight of the lookout of the passenger vessel until she was almost upon it.

We saw the white burst of steam as the siren was blown. We watched the desperate effort of the liner to check her way, to come about. But it was too much for the already crippled ship. Charlie cried out as a mighty wave drove the *Valhalla* down upon the sluggishly drifting wreck.

All the mad scene that ensued was strangely silent. We heard no crash when the collision occurred; heard no screams or shouts while the mob of desperate, white-faced passengers were fighting their way to the deck. The vain struggle to launch the boats was like a silent movie.

One boat was splintered while being lowered. Another, already filled with passengers, was lifted by a great wave and crushed against the side of the ship. Only shivered wood and red foam were left. The ship listed so rapidly that the boats on the lee side were useless. It was impossible to launch the others in that terrible, lashing sea.

"Virginia can swim," Charlie said hopefully. "You know she tried the Channel last year, and nearly made it, too."

He stopped to watch that terrible scene in white-faced, anxious silence.

The tramp went down before the steamer, drawing fragments of wrecked boats after it. The liner was evidently sinking rapidly. We saw dozens of hopeless, panic-stricken passengers diving off the lee side, trying to swim off far enough to avoid the tremendous suction.

Then, with a curious deliberation, the bow of the *Valhalla* dipped under green water; her stern rose in the air until the ship stood almost perpendicular. She slipped quickly down, out of sight.

Only a few swimming humans, and the wrecks of a few boats, were left on the rough gray sea. Charlie fumbled nervously with his dials, trying to get the scene near enough so that we could see the identity of the struggling swimmers.

A LONG boat, which must have been swept below by the suction of the ship, came plunging above the surface, upside down. It drifted swiftly among the swimmers, who struggled to reach it. I saw one person, evidently a girl, grasp it and drag herself upon it. It swept on past the few others still struggling.

The wrecked boat with the girl upon it seemed coming swiftly toward our blue-rimmed window. In a few minutes I saw something familiar about her.

"It's Virginia!" Charlie cried. "God! We've got to save her, somehow!"

The long rollers drove the overturned boat swiftly along. Virginia Randall clung desperately to it, deluged in foam, whipped with flying spray, the wild wind tearing at her.

About us, the clear still night was deepening. The air was warm and still; the hot stars shone steadily. Quiet lighted houses were in sight above the beach. It was very strange to look through the fire-rimmed circle, to see a girl struggling for life, clinging to a wrecked boat in a stormy sea.

Charlie watched in an apathy of grief and horror, trembling and speechless, doing nothing except move the controls to keep the floating girl in our sight.

HOURS went by as we watched. Then Charlie cried out in sudden hope. "There's a chance! I might do it! I might be able to save her!"

"Might do what?"

"We are able to see what we do because the field of the meteor bends light through the four-dimensional continuum. The world line of a ray of light is a geodesic in the continuum. The field I have built distorts the continuum, so we see rays that originated at a distant point. Is that clear?"

"Clear as mud!"

"Well, anyhow, if the field were strong enough, we could bring physical objects through space-time, instead of mere visual images. We could pick

V
5
3
M
A
R
3
1
XUM

Virginia up and bring her right here to the crater! I'm sure of it!"

"You mean you could move a girl through some four or five thousand miles of space!"

"You don't understand. She wouldn't come through space at all, but through space-time, through the continuum, which is a very different thing. She is four thousand miles away in our three-dimensional space, but in space-time, as you see, she is only a few yards away. She is only a few yards from us in the fourth dimension. If I can increase the field a little, she will be drawn right through!"

"You're a wizard if you can do it!"

"I've got to do it! She's a fine swimmer—that's the only reason she's still alive—but she'll never live to reach the shore. Not in a sea like that!"

Charlie fell to work at once, mounting another electromagnet beside the one he had set up, and rigging up two more X-ray bulbs beside the packing box which held the meteor. The motion of the boat in the fire-rimmed window kept drawing it swiftly away from us, and Charlie showed me how to move the dial of his rheostat to keep the girl in view.

BEFORE he had completed his arrangements, a patch of white foam came into view just ahead of the drifting boat. In a moment I made out a cruel black rock, with the angry sea breaking into fleecy spray upon it. The boat was almost upon it, driving straight for it. Charlie saw it, and cried out in horror.

The long black hull of the splintered boat, floating keel upward, was only a few yards away. A great white-capped breaker lifted it and hurled it forward, with the girl clinging to it. She drew herself up and stared in terror at the black rock, while another long surging roller picked up the boat and swept it forward again.

I stood, paralyzed in horror, while the shattered boat was driven full upon the great rock. I could imagine the

crash of it, but it was all as still as a silent picture. The boat, riding high on a crest of white foam, smashed against the rock and was shivered to splinters. Virginia was hurled forward against the slick wet stone. Desperately she scrambled to reach the top of the boulder. Her hands slipped on the polished rock; the wild sea dragged at her. At last she got out of reach of the angry gray water, though spume still deluged her.

I breathed a sigh of relief, though her position was still far from enviable.

"Virginia! Virginia! Why did I let you go?" Charlie cried.

Desperately he fell to work again, mounting the magnet and tubes. Another hour went by, while I watched the shivering girl on the rock. Bobbed hair, wet and glistening, was plastered close against her head, and her clothing was torn half off. She looked utterly exhausted; it seemed to take all her ebbing energy to cling to the rock against the force of the wind and the waves that dashed against her. She looked cold, blue and trembling.

The water stood higher.

"The tide is rising!" Charlie claimed. "It will cover the rock pretty soon. If I don't get her off in time—she's lost!"

HE finished twisting his wires together.

"I've got it all ready," he said. "Now I've got to find out exactly where she is, to know how to set it. Even then it's fearfully uncertain. I hate to try it, but it's the only chance."

"You can find out?"

"Yes. From the spectral shift and other factors. I'll have to get some other apparatus." He ran up to the laboratory, across the level field that lay black beneath the stars. He came back, panting, with spectrometer, terrestrial globe, and other articles.

"The tide is higher!" he cried as he looked through the blue-rimmed circle at the girl on the rock. "She'll be swept off before long!"

He mounted the spectrometer and fell to work with a will, taking observations through the telescope, adjusting prisms and diffraction gratings, reading electrometers and other apparatus, and stopping to make intricate calculations.

I helped him when I could, or stared through the ring of shining blue mist, where I could see the waves breaking higher about the exhausted girl who clung to the rock. Clouds of wind-whipped spray often hid her from sight. I knew that she would not have the strength to hold on much longer against the force of the rising sea.

Although driven almost to distraction by the horror of her predicament, he worked with a cool, swift efficiency. Only the pale, anxiety-drawn expression on his face showed how great was the strain. He finished the last spectrometer observation, snatched out a pad and fell to figuring furiously.

"Something queer here," he said presently, frowning. "A shift of the spectrum that I can't explain by distortion through three-dimensional space alone. I don't understand it."

We stared at the chilled and trembling girl on the rock.

"I'm almost afraid to try it. What if something went wrong?"

He turned to the terrestrial globe he had brought down and traced a line over it. He made a quick calculation on his pad, then made a fine dot on the globe with the pencil point.

"Here she is. On a rock some miles off Point Eugenia, on the coast of the Mexican State of Lower California. Most lonely spot in the world. No chance for a rescue. We must—

"My god!" he screamed in sudden horror. "Look!"

I LOOKED through the blue-ringed window and saw the girl. Green water was surging about her waist. It seemed that each wave almost tore her off. Then I saw that she was struggling with something. A great coiling tentacle, black and leathery and glis-

tening, was thrust up out of the green water. It wavered deliberately through the air and grasped at the girl. She seemed to scream, though we could hear nothing. She beat at the monster, weakly, vainly.

"She's gone!" cried Charlie.

"An octopus!" I said. "A giant cuttlefish!"

Virginia made a sudden fierce effort. With a strength that I had not thought her chilled limbs possessed, she tore away from the dreadful creature and clambered higher on the rock. But still a hideous black tentacle clung about her ankle, tugging at her, drawing her back despite her desperate struggle to break free.

"I've got to try it!" Charlie said, determination flashing in his eyes. "It's a chance!"

He closed a switch. His new coils sung out above the old one. X-ray tubes flickered beside the blue fire that ringed the window. He adjusted his rheostats and closed the circuit through the new magnet.

A curtain of blue flame was drawn quickly between us and the round, fire-rimmed window. A huge ball of blue fire hung about the meteorite and the instruments. For minutes it hung there, while Charlie, perspiring, worked desperately with the apparatus. Then it expanded; became huge. It exploded noiselessly, in a great flash of sapphire flame, then vanished completely.

Meteor, bench, and apparatus were gone!

In the light of the stars we could make out the huge crater the meteorite had torn, with a few odds and ends of equipment scattered about it. But all the apparatus Charlie had set up, connected with the meteoric stone, had disappeared.

He was dumbfounded, staggered with disappointment.

"Virginia! Virginia!" he called out, in a hopeless tone. "No, she isn't here. It didn't draw her through. I've failed. And we can't even see her any more!"

DESPERATELY I searched for consolation for him.

"Maybe the octopus won't hurt her," I offered. "They say that most of the stories of their ferocity are somewhat exaggerated."

"If the monster doesn't get her, the tide will!" he said bitterly. "I made a miserable failure of it! And I don't know why! I can't understand it!"

Apathetically, he picked up his pad and held it in the light of his electric lantern.

"Something funny about this equation. The shift of the spectrum lines can't be accounted for by distortion through space alone."

With wrinkled brow, he stared for many minutes at the bit of paper he held in the white circle of light. Suddenly he seized a pencil and figured rapidly.

"I have it! The light was bent through time! I should have recognized these space-time coordinates."

He calculated again.

"Yes. The scene we saw in that circle of light was distant from us not only in space but in time. The *Valhalla* probably hasn't sunk yet at all. We were looking into the future!"

"But how can that be? Seeing things before they happen!"

I have the profoundest respect for Charlie King's mathematical genius. But when he said that I was frankly incredulous.

"Space and time are only relative terms. Our material universe is merely the intersection of tangled world lines of geodesics in a four-dimensional continuum. Space and time have no meaning independently of each other. Jeans says, 'A terrestrial astronomer may reckon that the outburst on Nova Persei occurred a century before the great fire of London, but an astronomer on the Nova may reckon with equal accuracy that the great fire occurred a century before the outburst on the Nova.' The field of this meteorite deflected light waves so that we saw them several hours earlier, according to our

conventional ideas of time, than they originated. We saw several hours into the future.

"And the amplified field of the magnet, though strong enough to move Virginia through space, was not sufficiently powerful to draw her back to us across time. Yet she must have felt the pull. Some dreadful thing may have happened. The problem is rather complicated."

HE lifted his pencil again. In the glow of the little electric lantern I saw his lean young face tense with the fierce effort of his thought. His pencil raced across the little pad, setting down symbols that I could make nothing of.

My own thoughts were racing. Seeing into the future was a rather revolutionary idea to me. My mind is conservative; I have always been sceptical of the more fantastic ideas suggested by science. But Charlie seemed to know what he was talking about. In view of the marvelous things he had done that night, it seemed hardly fair to doubt him now. I decided to accept his astounding statement at face value and to follow the adventure through.

He lifted his pencil and consulted the luminous dial of his wrist watch.

"We saw that last scene some twelve hours and forty minutes before it happened—to put it in conventional language. The distortion of the time coordinates amounted to that."

In the light of dawn—for we had been all night at the meteor pit, and silver was coming in the east—he looked at me with fierce resolve in his eyes.

"Hammond, that gives us over twelve hours to get to Virginia!"

"You mean to go? But just twelve hours! That's better than the trans-continental record—to say nothing of the time it would take to find a little rock in the Pacific!"

"We have the *Golden Gull*! She's as fast as any ship we've ever flown."

"But we can't take the *Gull*! Those

alterations haven't been made. And that new engine! A bear-cat for power, but it may go dead any second. The *Gull* can fly, but she isn't safe!"

"Safety be damned! I've got to get to Virginia, and get there in the next twelve hours!"

"The *Gull* will fly, but—"

"All right. Please help me get off!"

"Help you off? It's a fool thing to do! But if you go, I do!"

"Thanks, Hammond. Awfully!" He gripped my hand. "We've got to make it!"

WITH a last glance into the gaping pit from which we had dug the marvelous stone, we turned and ran across to the hangars. As we ran the sun came above the sea in the east; its first rays struck us like a fiery lance. The mechanics had not yet appeared. Charlie pushed the doors back, and we ran out the trim little *Golden Gull*, beautiful with her slender wing and her graceful, tapering lines.

I seized the starting crank and Charlie sprang into the cockpit. I cranked until the mechanism was droning dismally, and pulled the lever that engaged it with the engine. I had been in too much haste to get up the proper speed, and the powerful new engine failed to fire. Charlie almost cried with vexation while I was cranking again.

This time the motor coughed and fell into a steady, vibrant roar. With the wind from the propeller screaming about me, I disengaged the crank and stood waiting while the motor warmed. Charlie gave it scant time to do so before he motioned me to kick out the blocks. I tumbled into the enclosed cockpit beside him, he gave the ship the gun, and we roared across the field.

In five minutes we were flying west, at a speed just under three hundred miles per hour. Charlie was crouched over the stick, scanning the instrument board, and flying the *Gull* almost at her top speed. Again and again his eyes went to the little clock on the panel.

"Twelve hours and forty minutes," he said. "And an hour gone already! We've got to be there by five minutes after six."

We were flying over Louisiana when the oil line clogged. The engine heated dangerously. Reluctantly, Charlie cut off the ignition, and fell in a swift spiral to an open field.

"We've got to fix it!" he said. "Another hour gone! And we needed every minute!"

"This new engine! It's powerful enough, but we should have had time to overhaul it, and make those changes."

CHARLIE landed with his usual skill, and we fell to work in desperate haste. A grizzled farmer, a wad of tobacco in his cheek and three ragged urchins at his heels, stopped to watch us. He had just been to his mailbox, and had a morning paper in his hand. Charlie questioned him about the storm.

"Storm-center nears the American coast," he read in a nasal drawl. "Greatest storm of year drives shipping upon west coast. Six vessels reported lost. S. S. *Valhalla*, disabled, sends S. O. S.

"A thousand lives are the estimated toll to-night of the most terrific storm of the year, which is sweeping toward the Pacific coast, driving all shipping before it. Radiograms from the *Valhalla* at 5 P. M. report that she is disabled and in danger. It is doubtful that rescue vessels can reach her through the storm."

We got the engine repaired, took off again. Charlie looked at the little clock.

"Five minutes to ten. Eight hours and ten minutes left, and we've got a darn long ways to go."

We had to stop at San Antonio, Texas, to replenish gasoline and oil.

"Ten minutes lost!" Charlie complained as we took off. "And that monster—waiting in the future to drag Virginia to a hideous death!"

Two hours later the plane developed

V
5
—
3

M
A
R

3

XUM

trouble in the ignition system. The motor was new, with several radical changes that we had introduced to increase power and lessen weight. As I had objected to Charlie, we had not done enough experimental work on it to perfect it.

WE limped into the field at El Paso and spent another priceless half-hour at work. I got some sandwiches at a luncheon counter beside the field, and listened a moment to a radio loudspeaker there.

"Many thousands are dead," came the crisp, metallic voice of the announcer, "as a result of the storm now raging on the Pacific coast, the worst in several years. The storm-center is spending its force on the coastal regions to-day. Millions of dollars in damage are reported in cities from San Francisco to Manzanillo, Mexico.

"The greatest disaster of the storm is the loss of the passenger liner *Valhalla*, of the Red Star Line. It is believed to have collided with the abandoned hulk of an Italian-owned tramp freighter, the *Roma*, which was left by its crew yesterday in a sinking condition. Radiograms from the liner ceased three hours ago, when she was said to be sinking. The officers doubted that her boats could be launched in such a sea—"

I waited to hear no more. Charlie checked our route while we were stopped. And we took off; we crossed the Rio Grande and flew across the rocky, brush-scattered hills of Mexico, in a direct line for the rock in the sea.

"If anything happens so we have to land again—well, it's just too bad," Charlie said grimly. "But we've got to go this way. It's something over six hundred miles in a straight line. Fifteen minutes to four, now. We have to average nearly three hundred miles an hour to get there."

He was silent and intent over his maps and instruments as we flew on over the lofty Sierra Madre Range, and over a long slope down to the Gulf

of California. Head-winds beset us as we were over the stretch of blue water, and we flew on into a storm.

"We had hardly time to make it, without the wind against us," Charlie said. "If it holds us back many miles —well, it just mustn't!"

PURPLE lightning flickered ominously in the mass of blue storm-clouds that hung above the mountainous peninsula of Lower California. I had a qualm about flying into it in our untested machine. But Charlie leaned tensely forward and sent the *Golden Gull* on at the limit of her speed. Gray vapor swirled about us, rent with livid streaks of lightning. Thunder crashed and rumbled above the roar of our racing engine. Wild winds screeched in the struts; rain and hail beat against us. The plane rose and fell; she was swirled about like a falling leaf. The stick struggled in Charlie's hands like a living thing. With lips tightened to a thin line, he fought silently, fiercely, desperately.

Suddenly we were sucked down until I had an uneasy feeling at the pit of my stomach. I saw the grim outline of a bare mountain peak dangerously close below us, shrouded in wind-whipped mist.

In sudden alarm I shouted, "We'd better get out of this, Charlie! We can't live in it long!"

In the roar of the storm he did not hear me, and I shouted again.

He turned to face me, after a glance at the clock. "We've less than an hour, Hammond. We've got to go on!"

I sank back in my seat. The plane rolled and tossed until I thanked my lucky stars for the safety strap. In nervous anxiety I watched Charlie bring the ship up again, and fight his way on through the storm. For an eternity, it seemed, we battled through a chaos of wind-driven mist, bright with purple lightning and shaken with crashing thunder.

Charlie struggled with the controls until he was dripping with perspira-

tion. He must have been utterly worn out, after thirty-six hours of exhausting effort. A dozen times I despaired of life. The compass had gone to spinning crazily; we dived through the rain until we could pick up landmarks below. Three times a great bare peak loomed suddenly up ahead of us, and Charlie averted collision only by zooming suddenly upward.

Then slate-gray water was beneath us, running in white-crested mountains. I knew that we were at last out over the Pacific.

"We've passed Point Eugenia," Charlie said. "It can't be far, now. But we have only fifteen minutes left. Fifteen minutes to get to her—before the attraction of the meteor jerks her away, perhaps to a horrible fate."

WE flew low and fast over the racing waves. Charlie looked over his charts and made a swift calculation. He changed our course a bit and we flew on at top speed. We scanned the vast, mad expanse of sea below the blue-gray clouds. Here and there were lines of white breakers, but nowhere did we see a rock with a girl upon it. Presently the green outline of an island appeared out of the wild water on our right.

"That's Del Tiburon," Charlie said. "We missed the rock."

He swung the plane about and we flew south over the hastening waves. I looked at the little clock. It showed two minutes to six. I turned to Charlie. "Seven minutes!" he whispered grimly.

On and on we flew, in a wide circle. The motor roared loud. An endless expanse of racing waves unreeled below us. The little hand crawled around the dial. One minute past six. Only four minutes to go.

We saw a speck of white foam on the mad gray water. It was miles away, almost on the horizon. We plunged toward it, motor bellowing loud. Five miles a minute we flew. The white fleck became a black rock smothered in

snowy foam. On we swept, and over the rock, with bullet-like speed.

As we plunged by I saw Virginia's slender form, tattered, brine-soaked, struggling in the hideous tentacles of the monster octopus. It was the same terrible scene that we had viewed, through the amazing phenomenon of distortion of light through space-time, four thousand miles away and twelve hours before.

In a few minutes the time would come when Charlie had ended our view of the scene by his attempt to draw the girl through the fourth dimension to our apparatus in Florida. What terrible thing might happen then?

Charlie brought the ship about so quickly that we were flung against the sides. Down we came toward the mad waves in a swift glide. In sudden apprehension, I dropped my hand on his shoulder.

"Man, you can't land in a sea like that! It's suicide!"

Without a word, he shook off my hand and continued our steep glide toward the rock. I drew my breath in apprehension of a crash.

I DO not blame Charlie for what happened. He is as skilful a pilot as I know. It was a mad freak of the sea that did the thing.

The gray waste of mountainous, white-crested waves rose swiftly up to meet us, with the rock with the girl clinging to it just to our right. The *Golden Gull* struck the crest of a wave, buried herself in the foam, and plunged down the long slope to the trough. We rose safely to the crest of the oncoming roller, and I saw the black outline of the rock not a dozen yards away.

Charlie had landed with all his skill. It was not his fault that the blustering wind caught the ship as she reached the crest of the wave and flung her sidewise toward the rock. It is no fault of his that the white-capped mountain of racing green water completed what the wind had begun and hurled the frail plane crashing on the rock.

V
5
3
M
A
R
3
1

I have a confused memory of the wild plunge at the mercy of the wave, of my despair as I realized that we were being wrecked. I must have been knocked unconscious when we struck. The next I remember I was opening my eyes to find myself on the rock, Charlie's strong arm on my shoulder. I was soaked with icy brine, and my head was aching from a heavy blow.

Virginia, shivering and blue, was perched beside us. I could see no sign of the plane: the mighty sea had swept away what was left of it. Clinging to the lee side of the rock I saw the black tentacles of the giant octopus—waiting for a wave to dash us to its mercy.

"All right, Hammond?" Charlie inquired anxiously. "I'm afraid you got a pretty nasty bump on the head. About all I could do to fish you out before the *Gull* was swept away."

HE helped me to a better position to withstand the force of the great roller that came plunging down upon us like a moving mountain. Virginia was in his arms, too exhausted to do more than cling to him.

"What can we do?" I sputtered, shaking water from my head.

"Not a thing! We're in a pretty bad fix, I imagine. In a few seconds we will feel the attraction of the meteor's field—the force with which I tried to draw Virginia to the crater through the fourth dimension. I don't know what will happen; we may be jerked out of space altogether. And if that doesn't get us, the tide and the octopus will!"

His voice was drowned in the roar of the coming wave. A mountain of water deluged us. Half drowned, I clung to the rock against the mad water.

Then blinding blue light flashed about me. A sharp crash rang in my ears, like splintering glass. I reeled, and felt myself falling headlong.

IBROUGHT up on soft sand. I sat up, dumbfounded, and opened my eyes. I was sitting on the steep

sandy side of a conical pit. Charlie and Virginia were sprawled beside me, looking as astonished as I felt. Charlie got to his knees and lifted the limp form of the girl in his arms.

Something snapped in my brain. The sand-walled pit was suddenly familiar. I got to my feet and clambered out of it. I saw that we were on our own landing field.

Astonishingly, we were back in the meteor crater. Charlie's vanished apparatus was scattered about us. I saw the gray side of the rough iron meteorite itself, half-buried in the sand at the bottom of the pit.

"What—what happened?" I demanded of Charlie.

"Don't you see? Simple enough. I should have thought of it before. The field of the meteorite brought Virginia—and us—through to this point in space. But it could not bring us back through time; instead, the apparatus itself was jerked forward through time. That is why it vanished. We got here just twelve hours and forty minutes after I closed the switch, since we had been looking that far into the future. The mathematical explanation—"

"That's enough for me!" I said hastily. "We better see about a warm, dry bed for Virginia, and some hot soup or something."

NOW the rough gray meteorite, in a neat glass case, rests above the mantel in the library of a beautiful home where I am a frequent guest. I was there one evening, a few days ago, when Charlie King fell silent in one of his fits of mathematical speculation.

"Einstein again?" I chaffingly inquired.

He raised his brown eyes and looked at me. "Hammond, since relativity enabled us to find the Meteor Girl, you ought to be convinced!"

Virginia—whom her husband calls the Meteor Girl—came laughingly to the rescue.

"Yes, Mr. Hammond, what do you think of Einstein now?"

The Readers' Corner



A Meeting Place for Readers of Astounding Stories

Now—Internationale Scientific Society

Dear Editor:

The genial editor of this "Astounding" publication has granted me a few words directed to all readers who may be interested.

The Science Correspondence Club, with the inception of the new year, will operate under an entirely new policy, most important of which is the change of name to Internationale Scientific Society. The archaic and tedious correspondence will be a minor consideration in the new policy. Our publications and form letter methods of communication keep all members fully informed as to up-to-date news of the Society. Affiliation with the "Verein für Raumschauffert" in Berlin has been accomplished also. This makes available to all "Internationale Scientific" members the latest news from the forefront of science in Germany, with especial reference to latest rocket interplanetary developments. Constant improvements on our monthly journal are always sought for. Contributors of well-known reputation are: Willy Ley, Earl D. Streeter, R. F. Starzl, Robt. A. Wai, Dr. Wm. Tyler Olcott, Lilith Lorraine and Dr. D. W. Morehouse, president of Drake University, Iowa.

This society is endeavoring to bring the scientific news and personal contact to all

scientifically inclined laymen of the world. Many prominent men in science and Science Fiction are honorary members, as is Mr. Bates, Editor of Astounding Stories. All information may be obtained from the business office at 8834 Michigan Ave., Chicago, Illinois. Thank you.—Walter L. Dennis, Treas.

Advice to Advertise

Dear Editor:

Astounding Stories makes me tickle the typewriter keys to tell you what I think about your magazine. It is absolutely without a doubt the best magazine on the market, and that means something. I have only been acquainted with Astounding Stories since May—since when I have had greater pleasure in reading them than anything else. To my sad disappointment I missed the first four issues, but I've read every story since.

The first story I read was "The Atom Smasher," and I considered this very good. The majority of your stories are very good. Occasionally a poor one will mix in, but I know we all regard this as only a slight error.

I suggest that it would be to your advantage to advertise Astounding Stories more than you do because it was by mere accident that I came in contact with it, and it has happened to others the same way. You would

V
5
—
3

M
A
R
3
1

XUM

see the increased number of copies sold if you make special advertising a part of your business. The reason I suggest this is because I know what your future readers are missing if they don't read *Astounding Stories*.

Here's wishing you success in continuing to publish the best stories.—Walter Oathout, 91 College Ave., Troy, New York.

"Cut That Romantic Stuff"

Dear Editor:

I am accepting your offer to come over to "The Readers' Corner," and am coming over in two ways, as you will see by my address.

First of all, I must say that I raise my hat to you and your coworkers for having brought out another Science Fiction magazine—a real benefaction to readers like myself who thrive, as it were, on such stories. I can tell you my eyes grew big with delight when I saw the first number—to me—of *Astounding Stories*. *Mille mercis*. Why don't you try publishing a thick Quarterly?

My favorite authors are A. Hyatt Verrill, J. W. Campbell, Jr., Miles J. Breuer, M. D., Captain S. P. Meek, Ray Cummings, Arthur J. Burks and Edmond Hamilton. If you get stories by these for your magazine it will continue to prosper, as they are excellent writers, and the first four have fine science in their tales. I have had only three copies of *Astounding Stories*, and the tales I like best are: "Vandals of the Stars," the serial, "Brigands of the Moon," "Monsters of Moyen"—this was most interesting—"The Ray of Madness," "The Soul Snatcher," and "The Jovian Jest." This last, though short, I thought to be very good, and it gave one furiously to think, too. While I like all kinds of Science Fiction, I have a special preference for interplanetary and fourth dimension stories.

Now, having handed out one or two bouquets, I am going to sling some brickbats. Doggone it, but why don't you cut out some of that romantic stuff in your stories? Goodness knows, but one has enough of love and the ubiquitous heroine in other tales without this sentimentality entering into Science Fiction. Indeed, that is the biggest criticism I have of *Astounding Stories*, and I do honestly wish that if you have absolutely got to give the stuff, you would confine it to half the stories. Half and half—that's fair, isn't it?

If you will publish this letter, which I should like you to do, it would draw to the notice of the other readers that I am always very pleased to correspond with any of them on science and science stories.

Now I'll dry up, wishing you the very best of sincere wishes for the continued success of your—or rather "our"—little treasure, *Astounding Stories*.—Glyn Owens, 20, Rugby Rd., Newport, Man., Canada.

Nossir—No "Half Pints"

Dear Editor:

I have been reading *Astounding Stories* for some time, although this is the first time I

have written, and I want to say it is one swell mag. I like all of its stories, though I like the ones of adventure on other planets and in strange lands best. But listen, I don't want any by a few half pint authors I know of that write for a few other quarter pint magazines. Let's have some more by such as Victor Rousseau, Capt. S. P. Meek, Arthur J. Burks, Murry Leinster and R. F. Starzl. Also Ray Cummings. Here's to them and to the best mag on the market. Remember, no half pints.—Boyd Goodman, 2801 Laclede St., Dallas, Texas.

"Out of Curiosity"

Dear Editor:

Seeing your magazine on the newsstands the other day, I purchased it out of curiosity to see whether it was just another magazine or something out of the ordinary. Being a reader of other Science Fiction magazines, I was surprised to see how much better *Astounding Stories* turned out to be than the rest. Even since that first issue I have been a steady reader of "our" magazine.

I think that one of the best improvements that could be made is to cut all the pages even. Wesso sure is a dandy artist. Try not to lose him. I, for one, am very much in favor of reprints. I think they would very much increase our circle of readers.

Some of your best authors are: S. P. Meek, V. Rousseau, Ray Cummings and S. P. Wright. Let's have some more novels by those authors, please.—E. F. Hittleman, 3400 Wayne Ave., Bronx, N. Y.

"Or What Have You?"

Dear Editor:

I've just finished reading the October issue of *Astounding Stories* and am convinced that the magazine is getting better and better.

I'd like to take back what I said in my first letter about interplanetary stories being ruled out, because I notice they are improving. They seem more realistic and true.

I like "Jetta of the Lowlands." Something different, don't you think? Seems strange to imagine what the ocean bottoms might be like.

And how can "Stolen Brains" help but be good when Captain Meek brings his Philo Vance to the rescue—that intelligent Dr. Bird. (This may sound like sarcasm, but it's meant to be praise.) I always read Dr. Bird first of all.

"Prisoners on the Electron" is just what I like. Somewhere I read a story similar to it—that of life on an electron. I don't doubt one bit that there can be life on such minute surfaces, which also gives me an idea that the earth may be an electron to some gigantic planet which is so large that we cannot comprehend its size. Couldn't that be possible?

I still find that among the contributors there is only one girl besides myself. Letters sent to me from readers are all from men or boys. Am I so different from other girls? Or what have you?—Gertrude Hemken, 5730 So. Ashland Ave., Chicago, Illinois.

Only Fiction**Dear Editor:**

I am writing a second letter criticising some of the later stories you published. I think *Astounding Stories* is steadily improving. In the June issue, "The Moon Master" takes first place. Other first place stories are: "The Forgotten Planet," (July); "The Second Satellite," (August); "Marooned Under the Sea," (Sept.); "The Invisible Empire," (Oct.).

I agree with Mr. W. Gelman. You ought to have coupons to fill out on reprints and see whether or not the majority vote for reprints. I saw a mistake in "Prisoners on the Electron." The author states that four months of time passed on the electron during fifteen seconds Earth time. That is wrong, because electrons revolve several thousand times per second around their nucleus or sun, so by the time Karl Danzig fished out Aaron and Nanette they would be as old as the hills. I would like to know if the story, "Marooned Under the Sea," was found near New Zealand or is it just fiction? Another thing I want to say is that you have too many serials.—Geo. Brandes, 141 South Church St., Schenectady, New York.

This Is Treason!**Dear Editor:**

This is the first time I have written to the "Corner," but I wished to call your attention to a story I have just finished reading in another magazine—"Skylark Three," by Edward E. Smith. I think it is by far better than anything I have read in your magazine. I thought you might be able to get something on this line.

Of course, some of the theories are rather far fetched. I think this is the best story I have read for years, and hope that if Smith writes any more, I will be able to read them.—D. R. Guthrie, P. O. Box 23, Copeland, Idaho.

Announcement**Dear Editor:**

Several months ago an announcement was made in this magazine concerning The Scienceers, an organization of scientifically-minded young men, with headquarters in New York City.

We wish to thank you for publishing this notice, which resulted in the acquisition of several new members. We are all readers of *Astounding Stories*, and consider it the premier magazine in the Science Fiction field.

The purpose of our organization, as taken from the constitution, is as follows: To promote informal fellowship among persons interested in science, and to foster discussion and debate on modern discoveries, theories, and projects in the realm of science.

The only requirements for membership in The Scienceers are that applicants must be over sixteen years of age, and must show a hearty willingness to cooperate with the other members in discussing theories, etc., in science.

The member of the club has the companionship and friendship of other persons interested in the same activities. He will find a congenial atmosphere upon his arrival and will have a wonderful time in helping the club to be bigger and better. He will be as well informed on the latest events in science as though he were taking a course in it, which in reality he will be doing. He will have access to the club's library, consisting of several hundred books and magazines on science and Science Fiction. In our library are the latest Science Fiction books published, such as "Red Snow," by F. W. Moxley, "The Monster Men," by E. R. Burroughs and "The World Below," by S. Fowler Wright. In our collection we have reprints that we feel sure many of our present Science Fiction fans have not read. We have a great many scientific books and magazines. The club buys regularly *Popular Science*, *Popular Mechanics*, *Science and Invention*, and others.

Those who would like to visit the clubroom will be gladly received. The clubroom is at 266 E. Van Courtland Ave. Get off at Mosholu Parkway station on the Jerome Avenue line. Our secretary, Allen Glasser, of 1610 University Ave., New York City, will receive all inquiries for information.

The Scienceers have a branch in Clearwater, Florida, and another in Temple, Texas. The former may be reached by writing to Mr. Guy Cole, Secretary, Clearwater, Florida, and the latter by writing to Mr. Gabriel Kirschner, Box 301, Temple, Texas.—Nathan Greenfeld, Librarian, The Scienceers, 873 Whitlock Ave., New York, N. Y.

"Abominable," "Rotten," etc.**Dear Editor:**

I aim for this letter to represent the hardest and reddest brickbats imaginably possible, excepting perhaps the first paragraph, not counting this prelude (warning).

I have classified the stories of all issues out so far, and the results show that Victor Rousseau, Ray Cummings, Murray Leinster, Capt. Meek, Charles W. Diffin, Arthur J. Burks, Harry Vincent, S. P. Wright, R. F. Starzl, Edmond Hamilton, Miles J. Breuer, M. D., James P. Olsen, Tom Curry, S. W. Ellis and Jackson Gee are your most outstanding authors. The first seven stand head and shoulders above the other authors, though.

Now for the brickbats. No kiddin'—where is your Editor's pride? We want a magazine to be proud of, don't we? Its binding is abominable. The edges are terrible; it takes ten minutes to find a certain page. The paper itself is absolutely rotten. What about the poor readers who want to have a Science Fiction library? He wants a magazine that can be bound and will look half good. Please put better grade paper in your magazine. And for goodness sake, answer in the department all questions and inquiries from the readers. Why not have a vote on this? I guarantee you that over 90% of the votes will want your answers to their personal questions. Please answer my request in "The

V
5
3
M
A
R
3
1
XUM

Readers' Corner.—Ward Elmore, 3022 Avenue K, Fort Madison, Iowa.

"Pictures of the Readers"

Dear Editor:

The November Astounding Stories is up to the high standard set by previous issues. For first place I nominate "The Pirate Planet," which promises to be as good as "Earth, the Marauder." The last part of "Jetta of the Lowlands" was a fitting conclusion to a great story. "Vagabonds of Space," "The Wall of Death," and "The Gray Plague" are all worthy of being ranked with your best stories.

The cover illustration is one of Wesso's best, if not the best. It is a marked improvement over the October one. There's also a great improvement in the illustrations inside the book, since all except one were drawn by Wesso.

I heartily approve of the suggestion of Jack Darrow, who proposes that you devote a page to your authors. Your writers are the outstanding Science Fiction authors of the day, and we should like to know something about them. If you happen to run out of new authors, you could run the lives and pictures of some of the readers (Mr. Darrow, Mr. Kirschner, Mr. Wentzler, etc.), who contribute almost as much material as some of your authors. To be serious, though, the above make many valuable suggestions, especially Mr. Darrow, with whom I agree on almost every point.

Those persons who said that the small size of Astounding Stories was insult to Science Fiction can't complain now. After October the majority of the monthly Science Fiction magazines will have the small size.

The controversy over the reprint question seems to be getting warm. There are a good many letters on this subject in this issue both pro and con. In fact, there were more "con" letters in this issue than all the previous issues combined. However, the "pros" are more than holding their own, and I believe that if a vote was held they would be in the majority.—Michael Fogaris, 157 Fourth St., Passaic, N. J.

Prefers More Science

Dear Editor:

The size of Astounding Stories now is O. K. Only it would be better if it was thicker than it is, even if you have to raise the price five cents. I like the Edgar Rice Burroughs stories and wish you would have them in your magazine.

In the November issue, "The Wall of Death" wasn't any good; "The Pirate Planet" was good; "The Destroyer" was fair; "The Gray Plague" was very good; "Vagabonds of Space" was excellent, but I didn't like the ending. "Jetta of the Lowlands" was fair. I don't like the stories by Victor Rousseau very much.

I don't want any reprints and I think you should cut the pages even. I wish you would have some true Science Fiction stories with

more science in them.—Alvin Wasserman, 339 N. 6th St., Allentown, Pa.

"Fits Book Case"

Dear Editor:

I have read every issue of Astounding Stories yet produced. Keep the magazine the same size, as it conveniently fits in a book rack or book case. I like stories on chemistry and physics, also stories narrating the exploits of Dr. Bird. I think your November issue is the best out yet. My favorite story so far is "The Gray Plague." I did not like "Beyond the Heaviside Layer." The illustrations are fine. Well, I guess it's about time for me to sign off.—Henry Seitz, 1732 Summerfield St., Brooklyn, N. Y.

Suggestions from Australia

Dear Editor:

I have accepted your invitation to join "The Readers' Corner" and give criticism on your magazine. I will criticize the recent stories first, and divide them into three classes: good, medium and bad.

August: "The Lord of Space," "The Second Satellite," "Silver Dome," "The Flying City," good. "The Planet of Dread," medium.

September: "Marooned under the Sea," "The Terrible Tentacles of L-472," good. "Problem in Communication," medium. "Murder Machine," bad.

Serials: "Brigands of the Moon," good. "Murder Madness," good, but I don't consider it a suitable story for this type of magazine. "Earth, the Marauder," good, but the end was too hurried. I wonder why the gnomes of Luar were brought into the story; I don't see that they serve any useful purpose there.

There seems to be a hand-rail around the submarines on the cover of the April number. If this is so, it is out of proportion. And don't you think that such monsters as those in "The Moon Master" would need more to eat than just the few herbivorous animals that could exist on the fungus vegetation?

I think that your magazine would be much better if printed on smoother paper and cut evenly. I am sure no one would mind the extra cost of the book. And why not call "The Readers' Corner" something more appropriate, such as the "Observatory," or the "Microscope," or something, anyway, that deals with science?—P. Leadbeater, Drysdale, Victoria, Australia.

Thanks Very Much

Dear Editor:

I would like to shake hands with Mr. P. Schuyler Miller. He has given us such conclusive and unopposable proof for reprints in his letter printed in the November issue, that there is hardly anything more to be said. All we ask (by "we," I mean those thousands of Readers who are eagerly waiting for a story of which they have heard so much) is one good reprint. That is, one a year. During the year 1930, Astounding Stories has

published five novels. Can you not publish four new novels and one reprint in 1931? It amounts to much the same thing.

Also, there are other magazines which publish Science Fiction and these would see to it that the good authors did not starve. The bad ones, however, deserve to. Especially when some poor misguided Editor accepts their stuff. No, Mr. Bates, I am not placing you in that category. The stories you publish certainly show that you are not misguided. Quite the opposite. At a vote taken among the members of the Sciencesers last week, the results showed that reprints were unanimously wanted. In my opinion, Astounding Stories is best fitted for the publishing of reprints because of the high standard it has preserved throughout the year of its existence.

I have been directed, Mr. Bates, because of the great work you have accomplished in popularizing science through Science Fiction, and because of the keen enjoyment you have given the Sciencesers during 1930, to inform you that you have been elected an honorary member of the Sciencesers.

The Sciencesers is now taking a vote among all its members to find out their favorite stories of 1930. That is, in Science Fiction. We want to find the five best serials, and the ten best short stories of the year. First returns indicate that Astounding Stories captured most of the honors. "Murder Madness," "Brigands of the Moon" and "Earth, the Marauder" having places among the serials. About six of the ten short stories were also published in Astounding Stories.

I close with best wishes from all Sciencesers for a bigger and better year for Astounding Stories. Happy birthday!—Nathan Greenfeld, President, Sciencesers, 873 Whitlock Avenue, New York, New York.

Words Are Weak

Dear Editor:

It was a terrible storm!

The thunder roared; the lightning flashed; the wind howled; the tempest beat through the night, bearing on its fleet winds of darkness a torrent of driving, splattering rain. Splintering darts of lightning crackled through the raging storm, their crystalline reflection caught in the driving sheets of watery spray; their swift illumination lighting but dimly a rocky shore beaten and tossed by black lashing waves of the angry ocean. And, upon that rugged, element-swept shore, cowered the Searcher.

He crouched there in the darkness, his muffled figure swaying to the fierce tug of the wind and the impact of the driving rain. Water ran in streams from his drenched clothing. The icy breath of the wind pierced through to his soul like so many needles of death. Placing a gaunt, weary hand above his brow he strained his vision to pierce out into the darkness.

And suddenly the storm ceased. The rain disappeared with a last futile spray, and the dark clouds overhead parted sullenly to reveal a cold frozen moon of silver. The thousands

of tiny aberrations in the tossing wavelets on the ocean's bosom sent steely reflection of the moon's luminescence in sparkling sheens to the Searcher's eyes. For long he hung there motionless, a gaunt shadow peering into the distant darkness of the horizon. But abruptly—

He started. He had sighted an object floating inward upon the tide. Running swiftly along the shore, he seized it eagerly as it fell to the shore at his feet. With a wild cry of exuberant delight he threw himself down upon the sands to scan its pages. It was a copy of Astounding Stories! Yes!

Out of the great ocean of magazine fiction it had come to the Searcher's eyes, the magazine supreme—Astounding Stories! A magazine which was new, a magazine which expressed something new in an entirely different way! A thing super-ordinary, it was—a boon to the tired fiction reader.

Yessirree! Something new and in a different way! You bet that's what I like, and that's why I halted, hearkened, and hastened to the newsstands to buy that new magazine, Astounding Stories. New authors!—a breath of delicious novelty!—the magazine of to-morrow's romance and the super-science thereof! Why, it's almost too good to be true, and here am I, ready to take that new mag to hand and make it our own.

Yes, I think we can call it "our" own, for with the installation of Astounding Stories comes the new epic of the magazine, a magazine which is made by the reader. Sure nuff—our wants and whims rule the magazine; so it's surely "ours," and I mean possessive!

So, Readers all, I'm going to take my part of the magazine this day and operate on it, no matter what Mr. Bates thinks or cares about it. Yes sir.

First, I'm creating a new department of a page which prints the picture of the most popular author (as voted for by the reader) and which gives a brief synopsis of his life. Once his picture has been printed, that's enough. Next time a new author.

And then I'm filling that magazine with new "different" stories, daring in aspect beyond ordinary Science Fiction, more glorious by far than any predecessors.

And now, the rest of you Readers, what are you going to do with your share? As I have said, I am going to do what I want with my part even if we have to split up the magazine and pass a page all around. There's just a lot of you Readers who look at a magazine, and, because it isn't your ideal, pass it up and go down the line passing up all the magazines. Take it from me, you'll never find your ideal.

Savvy? The only way to get that ideal is to step in and take a hand. Make your ideal! A magazine must be fashioned to the reader's wants! The fact is our weapon, and believe me I'm beaning Mr. Bates a smacking good one with it. As I said, the magazine is ours, and my part in it surely is going to be more daring in tone, thought and structure than any paltry nowaday Science Fiction! Reach out into the imagination, stretch your faintest

V
5
3
M
A
R
3
1
XUM

and most super-ordinary scientific hypothesis to its vaguest straining point, and produce—

A real, honest-to-goodness, glorious he-man action magazine of Science Fiction!

I mean it! And that's how my page is gonna be, and I'll bet that I have made my page of that future idealistic magazine, merely by writing this letter! How about it, Mr. Bates?

Aren't we all signed up as associate editors for that future "ideal magazine?"—Tom Olog, 940—5th St., San Bernardino, Calif.

Right! One on Us

Dear Editor:

I have been following with great interest Ray Cummings' latest piece, "Jetta of the Lowlands," which is rather unique in its ideas. In a recent issue Mr. Cummings explained to his readers that the flyer was made invisible by bending the light rays around it. This in itself is quite plausible, but when he tells us he could see the land below them, and the other flyer, we have to draw a line. It is quite plain that if the light is bent away from the hull of the flyer that no light will come to the eyes within, and that the invisibility will be more of a hindrance than an advantage. However, it was a good story and we know that authors cannot be perfect any more than ordinary humans can.

I am wishing you the best of luck for your second year, which you will soon enter!—W. Johnston, New York City.

A Riddle

Dear Editor:

I have only read two issues of Astounding Stories. These two have determined me to continue reading A. S. until I grow broke or give up my ghost.

The only brickbats that you are going to get are: Use a better grade of paper and bind the magazines more securely. Your stories are O. K. In fact there is only one story in the two issues (October and November), that I did not give a darn about, and that was "The Extra Man," by Jackson Gee.

As I have been a reader of Science Fiction for the past four years I think that I know a little about a good story when I read one.

And last but not least, I have a riddle to ask you.

Question: What is the difference between an egg and a copy of Astounding Stories?

Answer: When an egg falls it busts. But when a copy of Astounding Stories falls only the cover comes off.

A steady reader from now on.—Edward Anderson, 929 S. Westlake Ave., Los Angeles, Calif.

"High Literary Quality"

Dear Editor:

Just a few words to express my appreciation of the consistently high standard of stories which have so far appeared in Astounding Stories. I was mainly inspired to write to you by those two fine stories, "Brigands of the Moon," by Ray Cummings

and "Murder Madness," by Murray Leinster. The former was one of the year's best interplanetary stories, and the latter a very fine adventure yarn. As well as being of scientific interest, these stories held my interest to the end by reason of their high literary quality and the fact that they did not lack excitement. I am afraid these two qualities are lacking in a large number of Science Fiction stories. I would suggest that you accept these stories as a standard for the magazine.—A. M. D. Pender, 201, Red Lion Road, Tolworth, Surbiton, Surrey, England.

Expert Testimony

Dear Editor:

We had quite a little discussion at a recent meeting of The Scienceers as to why all of us consider Astounding Stories the best Science Fiction magazine printed to-day. One reason to which all of us agreed was your endless variety of good continued stories. They always have a new twist about them. I read a number of Science Fiction magazines each month. None of them comes anywhere near Astounding Stories as to the quality of the stories printed. On both long and short stories they rank way below the Astounding standard.

Your best writer is Ray Cummings, with Harl Vincent and R. F. Starzl close behind. I consider "Vagabonds of Space," by Harl Vincent, as the best story I have read so far. Ask Mr. Vincent to give us a sequel.—Herbert Smith, Sec., Scienceers, 2791 Grand Concourse, Bronx, New York City.

"Heads My List"

Dear Editor:

I'm accepting your kind invitation to come over to "The Readers' Corner" and express my opinion of your magazine.

I like it immensely. I read all the Science Fiction I can, and your magazine heads my list. I think the serial "The Pirate Planet" is as interesting a story as any I've read. Astounding Stories improves with every issue.—Dorothea Cutler, P. O. Box 122, Mesa, Arizona.

Two Problems

Dear Editor:

My last letter was entirely commendatory, but this time I am losing the full force of my critical powers (?) on the story "Marooned Under the Sea," by Paul Ernst. In this story the characters descend to the depths of the ocean by means of a large glass sphere. Mr. Ernst mentions the terrific strain on the supporting cable caused by the weight of the sphere. He quite overlooks the fact that it would float. As a matter of fact the sphere, not counting its contents, weights about 3,511,520 lbs.—less than an equal amount of water. Hard to believe, but true, as the figures show. The formula for the volume of a sphere is $V = \frac{4}{3} \pi r^3$ diameter cubed. It is a pretty little problem. Also, there was no need to break the helmets of the Quabos, since the hoses could be cut with an ax.

However, it was a fine story. Let's have more like it.

Here is another problem. X equals wonderful. Y equals superb. Z equals marvelous. XYZ equals Astounding Stories. Yes? No?

You are getting many requests to change your size. Don't do it. As it is now, it is just the size to carry conveniently, or put in your pocket. It is easier to read, too. Glazed paper is hard on the eyes. I join my fervent prayers to those who wish the edges cut smooth, however. It is hard to turn to the page you want, with the deckle edge you now have.

"Earth, the Marauder" was wonderful. Too bad it wasn't longer. "The Pirate Planet" is fine. Dr. Bird is keeping up the good work. Some of his stories are a bit far-fetched, but that is no drawback.

I notice that some authors repeat themselves. I read "Brigands of the Moon," by Cummings, and also his story, "Tarrano the Conquerer." The weapons used in both stories are identical.—Hugh M. Gilmore, 11307 N. Orange Drive, Hollywood, California.

Concerning "Indisputable Data"

Dear Editor:

From the time Astounding Stories first made its debut, I have been a rabid and enthusiastic reader of your excellent publication. As yet, I have never missed an issue, and only a physical incapability could compel me to. The unlimited amount of pleasure derived from your magazine is beyond compensation. Your selections are varied, interesting and based on cold, scientific logic, barring minor discrepancies. My whole-hearted approval, commendation and good wishes go to you for your remarkably fine work. Continue along the lines you are now pursuing, and I feel assured your magazine will outrival all others in circulation, as it already does in literature.

Perhaps I have been a trifle flowery, but I also have a criticism to make. Why do these skeptical and scientifically disposed critics continue to waste your valuable time picking scientific flaws in various stories? Some of the amateur experts' opinions really serve as a comic sequel after a night of interesting reading. If they would only stop to realize that some of their most indisputable data is merely hypothesis, the criticisms might be more lenient.

I am certainly enjoying "The Pirate Planet," by Charles W. Diffin, in the current issue. It is exceptionally well-written, and I am looking forward to more work by his pen. Other stories of merit are "Gray Denim," by Harl Vincent and "Slaves of the Dust," by S. W. Ellis.

Well, I guess I've unburdened myself enough for one evening. I give you many thanks for hours of enjoyable recreation, and wish everlasting success to your illustrious magazine and the personnel that makes it possible.—Mortimer Weisinger, 266 Van Cortlandt Ave., Bronx, N. Y.

A Letter from England

Dear Editor:

You will no doubt be surprised at receiving a letter of appreciation of your really stunning magazine from England. And here let me say as an aside, that I think Americans are very fortunate in having publishing concerns who are not afraid of publishing a modern book like Astounding Stories. In England I am considered abnormal minded because of my fondness for Science Fiction. We have nothing like it in our bookshops, where the stereotyped thriller and prosaic life and adventure novels are popular to the majority of English Readers.

Unfortunately, my file is incomplete by the June, July, August and September issues. My only kick is that "Brigands of the Moon" remains unfinished for me; and "Murder Madness" whetted my pallet for more. Still I am happy to be now in regular contact with the mag and hope for more stories like the above. Now for my only brickbat. Of all the stories I have read, "The Wall of Death" is the only one I dislike; and the worst of it is that it was written by Victor Rousseau, who is one of my favorite authors. The story is horribly reminiscent of the old Greek myth of the Minotaur, which it resembles in many phases. Still, this is an exception that proves Victor Rousseau's stories to be of high average value. And I shall expect to see more of him.

As regards bouquets, I can only say that each succeeding magazine is more astounding, more wonderful and of better value than the last. Of your authors I class as favorites S. P. Meek, C. W. Diffin, Murray Leinster, Harl Vincent, Ray Cummings and S. P. Wright among others, not forgetting Victor Rousseau. In the current edition I think "The Pirate Planet" is going strong; and "Gray Denim" is a peach of a story, as is also "The Ape-Men of Xloti." I like extra-dimensional stories of which I see you have one in your next issue, so roll on, January! I should like to see Astounding Stories printed more often, or else have a brother mag. The mag itself stands pat as it is, and more power to your authors' elbows! You will please excuse my bad penmanship, but since the war, in which I served throughout, I cannot altogether control the nerves of my right hand when writing.

I wish you a prosperous future with Astounding Stories!—Leo Greenhill, 5 Market Terrace, St. Leonards on Sea, Sussex, England.

"At Last It's Come"

Dear Editor:

I have read all the issues of your magazine from the July issue to the December, and it sure fills a long felt need in Science Fiction. Ever since I knew what an atom was I've been longing for just such a mag, and at last it's come. You sure deserve credit, and lots of it. You were better at the very start than your competitors ever will be, and that's saying a lot, as they're pretty good. By the

V
5
3
M
A
R
3
1
XUM

way, you may have noticed that one of them has come down to your size and price since your mag came out. That's proof against big mags. They're awful. However, I would not mind an Astounding Stories quarterly, and I'd gladly pay fifty cents for one. As to reprints, I'm in favor of them. I think a story by Edgar Rice Burroughs running in your mag each month would make it just about perfect.

As to your authors and stories, they're good as a general rule; however, you've made some pretty bad slips at times, such as "The Invisible Death," by Victor Rousseau, "The Wall of Death," by the same man, "Slaves of the Dust," "Gray Denim" and "The Apemen of Xloti." In fact, the December issue was pretty poor for you. I hope you make up for it next month.

When it comes to artists I think that Wesso takes the cake, especially in drawing machinery, etc. However, Gould is good on people and animate things, and I don't think you should drop him as many seem to wish. I like Wesso's covers very much, and I don't think they are too gaudy for a magazine like yours.

I like nearly all Science Fiction stories if they are written well, but especially I lean toward interplanetary, atomic adventure and prehistoric stories. I do not care so much for murders, wars, mind control, etc. I notice that you have never printed a story of prehistoric conditions existing at present on some part of the earth or universe, and I would like to see one of this type. I like serials only if they do not get boresome; and a lot of them do. That is the trouble. I think that the love interest in your stories is a good point, and should be encouraged in your authors. And I also think there should be more interplanetary friendship than hatred, and that the heroes should fight beasts rather than men, as a rule, in your stories.

Just one more thing before I close. I think that Astounding Stories should have more than one department. I would like to see a list of scientific terms defined each month; a department for answering scientific question; and some kind of fraternity of Science Fiction Readers with membership cards, some kind of emblems, and possibly an entrance test of some kind. Seriously, now, why not consider this and take up a vote among your Readers to see what they think? You could cut down on "The Readers' Corner" for them without using much more space, or you could enlarge the mag a little. What say?

Well, I'm about out of Z-ray so I guess I'll come back to earth and refuel with the January issue, which will be out soon. So long and good luck.—Frank Missman, Jr., V. E. R. (Very Enthusiastic Reader), 739 N. Alexandria, Los Angeles, Calif.

Gr-r-r—She's Mad!

Dear Editor:

Gr-r-r, now I am mad! I do wish that people who want a regular instruction book of a magazine would kindly refrain from spending their valuable pennies on ours.

And if Mr. Johnston of Newark believes us who like A. S. to be morons, why let's be morons! for when ignorance is bliss, 'tis folly to be wise. I'd like to inform this highly intelligent person that our mag is dealing with pure Science Fiction, and why should any author go into detail describing how cities are made to float and why invisible cloaks are invisible? Why, if every paragraph were broken off to let us know how this or that is possible, I'm sure we'd all be yawning and nodding over the magazine, and finally discard it entirely in search of something more to our liking!

Why waste your time, Mr. Johnston, telling us you don't like A. S.? Just don't purchase it, if it isn't to your liking. We're satisfied with what we have.

What if the stories are like fairy tales? Isn't all fiction more or less of a fairy tale? I want Mr. Johnston to get this point: what we want is fiction, pure Science Fiction and not instructions. We read A. S. as a pleasure. We do not have to be scientists just because we are interested in science!

"The Wall of Death" was grand. It's somewhat terrorizing and gruesome, but I get a big "kick" out of such horrors. However, I hope nothing like that would ever happen, 'cause I'm 18 years old, and I'd be among the first ones to be chosen for those mad half-human jelly-fishes, without a doubt.

I shudder to think that meteors could be hurled from one planet to another and then have some kind of machine, with people in it, on the inside of the meteor. But the hero of "The Gray Plague" surely proved himself a hero, in spite of his handicap. I relish the idea of that Venusian instrument, by which one can learn all from another within a few minutes. Something for our students who cannot seem to learn anything.

Here's one point that I don't like: Why are all those invaders from other planets hostile? Why can't they go on an exploring expedition to our Earth? C'm'on, you Authors—get busy!

"The Pirate Planet" has me all hot and bothered, and my brain in a muddle how any craft of such dimension can move through space with such speed. As the story has just started, I can't say much about it, but here's hoping the captured hero conquers the hostile invaders and comes home with bells on and colors flying, as all good stories should end.

That Sargasso Sea, in "Vagabonds of Space," reminds me of a Halloween ghost. And it was just as bad as a ghost, too. After having been scattered once, it just coolly collects itself into twice its size. Br-r-r—that gives me the chills. Howsoever, nevertheless, be that as it may, I will say that I liked it so much that I'm asking for more like it.

Another word to ye Authors: Please do not always have the girls in your stories such sweet little bundles of humanity. Aren't there any tall girls in your imaginations? Please give us tall girls a break once in a while. It makes me feel better. Thanks.—Gertrude Hemken, 5730 So. Oshland Ave., Chicago, Ill.

"Also Amused . . . But—"

Dear Editor:

Since my good friend Forrest Ackerman has undertaken to suggest an author whose works would be enjoyed by your readers, I will add two more to your "should have" list. They are Francis Flagg, an author who is firmly engraved in the minds of all Science Fiction lovers as a genius at writing time-traveling and dimensional stories, and Jack Williamson, a shark for new plots and inventions and one who knows how to put romance into a story.

Although I doubt whether the Editor himself can secure stories from these two famed authors, [Wrong!] At this time we have two or three stories by Jack Williamson waiting their turn to be published!—Ed.] I hope they may see our wants and favor us with a tale in the near future.

I agree with George K. Addison in that Miles J. Bruer is a "wow" in other magazines, but I emphatically disagree in that he does not belong in *Astounding Stories*. Maybe "A Problem in Communication" wasn't as good as some others he has written, but do you think he will honor us with a real good story if he, himself, gets such a welcome as Mr. Addison gave him? If you have faith in "the good old Doc," I am sure he will feel encouraged and consequently be spurred to greater heights.

As for Mr. C. E. Bush: I am also amused by some of the letters in "The Readers' Corner," but not from those who take their literature too seriously. Rather, from those who write letters such as his. If he doesn't care whether a story is scientifically possible or not, why, then, doesn't he read Anderson's *Fairy Tales* or some of the Oz books?—Jim H. Nicholson, 40 Lunado Way, San Francisco, Calif.

"Shrewd," Yet Somehow Obtuse!

Dear Editor:

I like your magazine. By this, I do not mean that it is the best Science Fiction periodical, for it apparently is not; but it is the most reliable. I am sure when I pick up your magazine that I shall find therein consistently interesting stories. I have yet to find a story that failed to hold my attention; on the other hand, I have yet to find a masterpiece. Of all the Editors, you have shown yourself the shrewdest judge of public taste, but also the least interested in the advancement of Science Fiction.

Your authors are among the leading lights in Science Fiction; yet, strangely, the days when they submit their offerings to *Astounding Stories* seem to be "off days." Not one of them has given us a story to equal his best for the other magazines. For instance, Ray Cummings has yet to write a story for you as entertaining as "The Girl in the Golden Atom" or his others. Speaking of Cummings, I wish he would take a course in grammar. His grammatical atrocities—such as sentences without predicates—are eye-wracking.

The main purpose of this letter, however,

is to offer a fervent plea for reprints. I am unalterably opposed to your short-sighted policy in regard to the reprinting of old Science Fiction tales long out of print. You made an utterly asinine statement when you declared that 99 per cent of your readers have already read these classics. [We did not say that. We said: "Would it be fair to 99 per cent of our Readers to force on them reprint novels they have already read, or had a chance to read?—Ed.] I am willing to wager that the percentage is nearer 10 per cent. For instance, can a baby read magazines? You seem to grant them this strange ability.

Most of the stories that should be reprinted were published from eight to fifteen years ago, in one other magazine. That automatically excludes all those who have not been constant Readers of that one magazine. In the second place, the average Reader of your magazine is under twenty-one (I am eighteen myself). When the science classics were published, we were anywhere from four to ten years of age. In the third place, relatively few of these stories were published in book form, and these few have for years been out of print. Try to buy "The Moon Pool," the greatest Science Fiction story ever written, in book form. In the fourth place, even those who were old enough to understand them did not become interested in Science Fiction until several years ago. In the fifth place, the few who have read them—and they are very few—would welcome the chance to re-read them. In the sixth place, and this is the most important reason of all, not one of the stories you have published is worth re-reading, or is even a sixteenth as good as some of the old stories.

Take a sporting offer. If you don't, I won't think much of you. Publish just one of the Science Fiction classics, preferably A. Merritt's "Through the Dragon Glass," which so many of your Readers have clamored for, and see how gratifying is its reception. If it does receive their acclaim, you could reprint one story in each issue.—J. Vernon Shea, Jr., 1140 N. Negley Avenue, Pittsburgh, Pa.

"Right Formula"

Dear Editor:

I have been a satisfied and silent reader of your magazine, and while I'm still satisfied, I wish to break my silence.

A letter by C. E. Bush, of Decatur, Ark., in the January issue has caught my attention. Miss Bush apparently does not care whether the stories contain science or not. I believe she wants the author to leave out the scientific explanations of the various machines and forces used in the story. To me, an "improbable" story is much more interesting if the author succeeds in making it seem perfectly plausible. The author needs to give technical explanations now and then to do this; and a good author can weave these facts into the fiction in such a manner that they are not dry.

For some reason, the letter by M. Clifford

V
5
3
M
A
R
3
1
XUM

Johnston, of Newark, N. J., antagonizes me. I am willing to admit that there are—or were—one or two stories that showed a definite lack of scientific explanation in certain parts, yet I do not believe that all the issues can be condemned because of these few stories. Mr. Johnston is apparently the opposite of Miss Bush. He, from the "sound" of his letter, revels in scientific explanations. On the whole I've enjoyed practically every story, and am thankful to you for your magazine. I believe that most of the authors have found the right formula for mixing their explanations with the story so that such technical discussions are complete without being dry.

I enjoy the novelettes more than either the short stories or the serials. The serials are all right, but a month is too long to let the hero or heroine suffer. Imagine how WE suffer, too, from the suspense!

If either Miss Bush or Mr. Johnston feel that they have been misunderstood and wronged in any way I shall be glad to either apologize or vindicate myself in a personal letter to them.

May Astounding Stories continue to improve!—Ben Smith, Box 1542, Butte, Montana.

Fiction's the Thing!

Dear Editor:

Hurrah for Mr. Lorenzo's letter in January's "The Readers' Corner"! For a half year already, all other Science Fiction magazines have had to struggle along without my patronage, also. For the same reason as Mr. Lorenzo gives, I want to heartily congratulate you, Mr. Editor, on your magazine.

I have read Science Fiction stories since the first magazine of its kind ever appeared in print. They started out good, but in the last few years have utterly degenerated into a collection of dry, drawn-out lectures.

Also, C. E. Bush's letter should be rated as 100 per cent correct. We want FICTION mixed with some science, and above all a good plot and lots of action; and if your authors feel so inclined, let them weave a romance into the stories, too. "We read stories to be amused, not for technical information." I am a radio operator, but I wouldn't think of reading a story for information on the latest transmitter design.

Mr. Editor, your choice of authors is par excellence. I can't too highly emphasize this, because we don't want the authors who write for other Science Fiction magazines. Why? Because they can't even write a story that has a semblance of coherence or plot to it, and never any action. If you should ever use any of these writers, I shall give up Science Fiction altogether. Please, Mr. Editor, continue to run Astounding Stories yourself, and don't heed the request of a minority who want dead authors to write dead stories in our magazine.

"The Pirate Planet" is the fastest moving, best written interplanetary story I have ever read, and I've read scores. C. W. Diffin surpasses himself. "Vagabonds of Space" was great. Isn't a sequel possible?

I have your January issue before me, and although I haven't read it yet, I'm delighted to see Murray Leinster with us again. He's excellent. I can't figure out how you can afford so many top-notch authors in each issue, but keep it up, because it's the life of your magazine. As Mr. Addison says in his letter, "Why ruin a truly great magazine by catering to a misguided minority?" and printing flops by cheap writers who are ruining other Science Fiction magazines?

Forgive me for so much repetition, Mr. Editor; run your magazine "as is" and I'll continue to be an interested reader.—F. C. Favre, 124 Columbia Heights, Brooklyn, N. Y.

For Blushers

Dear Editor:

I noticed in a letter in the December number of Astounding Stories that one of your Readers thinks your covers too gaudy. In fact, he blushes when he buys it. If he feels that way about it, why doesn't he subscribe to it and take the cover off when he reads it? I believe that the majority of your Readers like your covers and illustrations, and are not afraid to let people see them reading Astounding Stories.

I wish that you could have a long novelette like "The Ape-Men of Xloti" in every issue of "our" magazine. The longer stories are most always the more interesting. That is one of the reasons why I like book-length serials.

Why should Five-Novels Monthly get all the breaks? I am sure that you as the Editor of "our" magazine think Astounding Stories the best magazine published by Mr. Clayton. I should think that you would like to see it published in as good an edition as F. N. M. I am pretty sure that the majority of your Readers would not mind paying five cents more for many more pages of fiction, smooth-cut edges, and a better grade of paper.—Jack Darrow, 4225 N. Spaulding Avenue, Chicago, Illinois.

"The Readers' Corner"

All Readers are extended a sincere and cordial invitation to "come over in 'The Readers' Corner'" and join in our monthly discussion of stories, authors, scientific principles and possibilities—everything that's of common interest in connection with our Astounding Stories.

Although from time to time the Editor may make a comment or so, this is a department primarily for Readers, and we want you to make full use of it. Likes, dislikes, criticisms, explanations, roses, brickbats, suggestions—everything's welcome here; so "come over in 'The Readers' Corner'" and discuss it with all of us!

The Editor.

WIN \$3,700.00!

Twenty-eight people, from a boy of 15 to elderly men and women, recently solved our puzzles and won a place in our Good Will Fund Prize Distribution. They won a total of \$34,210.00. We have deposited over \$7,900.00 more in a large Chicago bank to pay dozens of new prizes to people who answer our latest ads. It's your big opportunity! Here's the latest puzzle.



Clues: Some-
where among
these pictures
are two, and
only two, exact-
ly alike—iden-
tical in hairstyle, collars, and
accessories. They are the twin pic-
tures of Clara Bow. If you are
lucky enough to find them, by
all means rush the numbers of the twins to
me for submission to puzzle judges.

Additional \$850.00 for Promptness

If your answer is correct you will be eligible to win a brand new 90 h. p. Waco airplane (and complete flying instruction) or \$2350.00 cash—with \$850.00 extra for promptness, making the total \$3,700.00 all cash. Many other prizes paid at same time. Duplicate prizes awarded in case of ties. Cash reward for all taking active part. No prize less than \$10.00. No more prizes for you to solve. No obligation. Perhaps YOU may be the winner of the highest prize! Send no money, but hurry!

M. J. MATHER, Advertising Manager, Room 140, 54 W. Illinois St., Chicago, Ill.

FIND THE TWINS

Below are 12 pictures of Clara Bow, the great Paramount Movie Star. Look at these pictures carefully. At first they all look alike—but that's the "catch"—so study them closely—do not make a mistake. Follow the clues.

OLD MONEY and stamps WANTED

POST YOURSELF! It pays! I paid J. D. Martin, Virginia, \$200 for a single copper cent. Mr. Manning, New York, \$2,000 for one silver dollar. Mrs. G. F. Adams \$740 for a few old coins. I want all kinds of old coins, medals, bills and stamps. I pay big cash premiums.

WILL PAY \$100 FOR DIME

1894 S. Nickel \$50 for 1915 Liberty Head Nickel (not buffalo) and hundreds of other amazing prizes for coins. Get in touch with me. Send 4¢ for Large Illustrated Coin Folder and further particulars. It may mean much profit to you. Write today to

NUMISMATIC COMPANY OF TEXAS
FORT WORTH, TEXAS
[Largest Rare Coin Establishment in U.S.]

NOW! HOT WATER INSTANTLY

ANYWHERE—ANY TIME

EVERY HOME CAN AFFORD THIS AMAZING LOW COST ELECTRIC WATER HEATER.

The GREATEST SELLER AND MONEY MAKER for AGENTS and DISTRIBUTORS ever devised.

The LUX New Improved ELECTRIC WATER HEATER boils water steaming, sizzling hot in less than 10 seconds. No gas, no principles—unheard of low cost.

MEN—WOMEN. Make huge profits, full or spare time. Vivid, dynamic demonstration sells LUX instantly.

FREE OFFER—NO INVESTMENT



LUX-VISEL CO.
Dept. NG-3

Indiana

BIG BARGAINS BRING YOU STEADY CASH EARNINGS!

Barker of Tenn. sold 1800 pairs in a few weeks. Stanford made \$15 fine 3 hours. Longwan's Work Pants, Broches, Overalls, meet store competition. All-year sellers that everybody buys. Write TODAY for sensational FREE Sales Quilt. Address Dept. N-3 **LONGWEAR TROUSER CO.**
489 Broome St. New York

Show Folks How to Resole Shoes for Only 3¢ a Pair!

Earn Up to \$6.00 an Hour!

IT'S AMAZING! A putty-like substance that completely resoles shoes and makes them look brand new. No nails, no tools necessary. Just an old knife. Spreads like butter on bread. Fills in cracks and breaks. Dries hard and smooth over night. Wears like iron. Agents cleaning up. Your big opportunity.

WRITE FOR DETAILS

Perfect Mfg. Co., Dept. L-579, Cincinnati, Ohio

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

BIG PAY-Giving Away Shirts, Ties, Underwear!

START
NOW
SAMPLES
FREE

Our Free Offers Now Famous
Immediate opening for you to tell your friends about Carlton's national whale-of-a-sale! New merchandise plan sweeping the country from coast to coast. Big Cash Pay for you starts at once. Sales experience unnecessary.

1 Shirt Free with Every 3
Your customers won't match these values anywhere. Also 1 Tie Free with every 3... 1 suit of lightweight Underwear Free with every 3. Free Hosiery, too! The plan's a business winner—a proven money maker.

Mail Coupon—Test this Plan
Complete line of gorgeous sample fabrics given free. De luxe presentation that hands you cash with every showing. Act at Once—Capitalize this amazing free offer plan.

CARLTON MILLS, INC.
79 Fifth Avenue, New York

Carlton Mills, Inc., Dept. 100-H.
79 Fifth Ave., New York

I think I can give away Free Shirts, Ties, Underwear. Send your samples.

Name.....
Address.....
City..... State.....

Photos ENLARGED

Size 16x20 inches
Send any photo, portrait or bust from studio, landscapes, or pet animals, etc., enlargements of any part of your photo. Safe and reliable. Your original photo guaranteed.

SEND NO MONEY Just mail photo or snapshot and we will mail you a week later your beautiful life-like enlargement size 16x20 in. guaranteed fadeless. Pay postage 25¢ plus postage on photo 20¢ with each enlargement we will send. **SPECIAL OFFER** With each enlargement we will send **FREE OFFER** send FREE book—**United Photo**—a book of 100 pages of photo tips. Take advantage now of this amazing offer—send your photo today.

UNITED PORTRAIT COMPANY
900 West Lake St. Dept. C-593, Chicago, Ill.

98¢



CORNS

and tender toes—relieved in 1 minute by these thin, soothering, healing pads. Safe! At all drug, shoe and dept. stores.

**Dr. Scholl's
Zino-pads**



Put one on—
the pain is gone!

**NEW
Revolving
AUTO
BRUSH**

**BIG MONEY
MAKER!**

Sensational new invention makes car washing easy and **SURE**! by **GY-RO** **SURE**! No chamois, soap or spray needed. Gy-ro sells to **100 PER CENT PROFIT FOR AGENTS:** New sales plan makes success certain. Big profits easy. Write AT ONCE for particulars.

GY-RO BRUSH COMPANY
Bloomfield, N. J.

Dept. C-27

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

LOOK! TIRES NEW LOW PRICES Why Pay More?

GOODRICH, GOOD YEAR, U.S.
Firestone and OTHER TIRES

Lowest Prices on Earth!
Thousands of satisfied tire owners in the U.S.A. Our 18 years of business speaks for itself. This is a responsible company who make tires for the world's largest tire makers. Make tires at lowest prices in history—Guaranteed to give 12 months' service.

Don't Delay—Order Today

CORD Tires **BALLOON Tires**

Size **Tires** **Tubes** **Size** **Tires** **Tubes**

80x14 2.20 91.00 29x4.50 3.00 1.15

82x14 2.70 1.15 30x4.50 2.45 1.30

84x14 2.90 1.15 30x4.75 2.45 1.30

86x14 2.95 1.15 30x5.00 2.45 1.30

88x14 3.00 1.15 30x5.25 2.90 1.30

90x14 3.00 1.15 30x5.50 2.90 1.30

92x14 3.20 1.45 30x5.75 2.95 1.30

82x15 2.90 1.15 31x5.25 3.00 1.30

84x15 3.20 1.45 31x5.50 3.00 1.30

86x15 3.20 1.45 31x5.75 3.00 1.30

88x15 3.20 1.45 31x6.00 3.00 1.30

90x15 3.20 1.45 31x6.25 3.00 1.30

92x15 3.20 1.45 31x6.50 3.00 1.30

94x15 3.20 1.45 31x6.75 3.00 1.30

96x15 3.20 1.45 31x7.00 3.00 1.30

98x15 3.20 1.45 31x7.25 3.00 1.30

100x15 3.20 1.45 31x7.50 3.00 1.30

102x15 3.20 1.45 31x7.75 3.00 1.30

104x15 3.20 1.45 31x8.00 3.00 1.30

106x15 3.20 1.45 31x8.25 3.00 1.30

108x15 3.20 1.45 31x8.50 3.00 1.30

110x15 3.20 1.45 31x8.75 3.00 1.30

112x15 3.20 1.45 31x9.00 3.00 1.30

114x15 3.20 1.45 31x9.25 3.00 1.30

116x15 3.20 1.45 31x9.50 3.00 1.30

118x15 3.20 1.45 31x9.75 3.00 1.30

120x15 3.20 1.45 31x10.00 3.00 1.30

122x15 3.20 1.45 31x10.25 3.00 1.30

124x15 3.20 1.45 31x10.50 3.00 1.30

126x15 3.20 1.45 31x10.75 3.00 1.30

128x15 3.20 1.45 31x11.00 3.00 1.30

130x15 3.20 1.45 31x11.25 3.00 1.30

132x15 3.20 1.45 31x11.50 3.00 1.30

134x15 3.20 1.45 31x11.75 3.00 1.30

136x15 3.20 1.45 31x12.00 3.00 1.30

138x15 3.20 1.45 31x12.25 3.00 1.30

140x15 3.20 1.45 31x12.50 3.00 1.30

142x15 3.20 1.45 31x12.75 3.00 1.30

144x15 3.20 1.45 31x13.00 3.00 1.30

146x15 3.20 1.45 31x13.25 3.00 1.30

148x15 3.20 1.45 31x13.50 3.00 1.30

150x15 3.20 1.45 31x13.75 3.00 1.30

152x15 3.20 1.45 31x14.00 3.00 1.30

154x15 3.20 1.45 31x14.25 3.00 1.30

156x15 3.20 1.45 31x14.50 3.00 1.30

158x15 3.20 1.45 31x14.75 3.00 1.30

160x15 3.20 1.45 31x15.00 3.00 1.30

162x15 3.20 1.45 31x15.25 3.00 1.30

164x15 3.20 1.45 31x15.50 3.00 1.30

166x15 3.20 1.45 31x15.75 3.00 1.30

168x15 3.20 1.45 31x16.00 3.00 1.30

170x15 3.20 1.45 31x16.25 3.00 1.30

172x15 3.20 1.45 31x16.50 3.00 1.30

174x15 3.20 1.45 31x16.75 3.00 1.30

176x15 3.20 1.45 31x17.00 3.00 1.30

178x15 3.20 1.45 31x17.25 3.00 1.30

180x15 3.20 1.45 31x17.50 3.00 1.30

182x15 3.20 1.45 31x17.75 3.00 1.30

184x15 3.20 1.45 31x18.00 3.00 1.30

186x15 3.20 1.45 31x18.25 3.00 1.30

188x15 3.20 1.45 31x18.50 3.00 1.30

190x15 3.20 1.45 31x18.75 3.00 1.30

192x15 3.20 1.45 31x19.00 3.00 1.30

194x15 3.20 1.45 31x19.25 3.00 1.30

196x15 3.20 1.45 31x19.50 3.00 1.30

198x15 3.20 1.45 31x19.75 3.00 1.30

200x15 3.20 1.45 31x20.00 3.00 1.30

202x15 3.20 1.45 31x20.25 3.00 1.30

204x15 3.20 1.45 31x20.50 3.00 1.30

206x15 3.20 1.45 31x20.75 3.00 1.30

208x15 3.20 1.45 31x21.00 3.00 1.30

210x15 3.20 1.45 31x21.25 3.00 1.30

212x15 3.20 1.45 31x21.50 3.00 1.30

214x15 3.20 1.45 31x21.75 3.00 1.30

216x15 3.20 1.45 31x22.00 3.00 1.30

218x15 3.20 1.45 31x22.25 3.00 1.30

220x15 3.20 1.45 31x22.50 3.00 1.30

222x15 3.20 1.45 31x22.75 3.00 1.30

224x15 3.20 1.45 31x23.00 3.00 1.30

226x15 3.20 1.45 31x23.25 3.00 1.30

228x15 3.20 1.45 31x23.50 3.00 1.30

230x15 3.20 1.45 31x23.75 3.00 1.30

232x15 3.20 1.45 31x24.00 3.00 1.30

234x15 3.20 1.45 31x24.25 3.00 1.30

236x15 3.20 1.45 31x24.50 3.00 1.30

238x15 3.20 1.45 31x24.75 3.00 1.30

240x15 3.20 1.45 31x25.00 3.00 1.30

242x15 3.20 1.45 31x25.25 3.00 1.30

244x15 3.20 1.45 31x25.50 3.00 1.30

246x15 3.20 1.45 31x25.75 3.00 1.30

248x15 3.20 1.45 31x26.00 3.00 1.30

250x15 3.20 1.45 31x26.25 3.00 1.30

252x15 3.20 1.45 31x26.50 3.00 1.30

254x15 3.20 1.45 31x26.75 3.00 1.30

256x15 3.20 1.45 31x27.00 3.00 1.30

258x15 3.20 1.45 31x27.25 3.00 1.30

260x15 3.20 1.45 31x27.50 3.00 1.30

262x15 3.20 1.45 31x27.75 3.00 1.30

264x15 3.20 1.45 31x28.00 3.00 1.30

266x15 3.20 1.45 31x28.25 3.00 1.30

268x15 3.20 1.45 31x28.50 3.00 1.30

270x15 3.20 1.45 31x28.75 3.00 1.30

272x15 3.20 1.45 31x29.00 3.00 1.30

274x15 3.20 1.45 31x29.25 3.00 1.30

276x15 3.20 1.45 31x29.50 3.00 1.30

278x15 3.20 1.45 31x29.75 3.00 1.30

280x15 3.20 1.45 31x30.00 3.00 1.30

282x15 3.20 1.45 31x30.25 3.00 1.30

284x15 3.20 1.45 31x30.50 3.00 1.30

286x15 3.20 1.45 31x30.75 3.00 1.30

288x15 3.20 1.45 31x31.00 3.00 1.30

290x15 3.20 1.45 31x31.25 3.00 1.30

292x15 3.20 1.45 31x31.50 3.00 1.30

294x15 3.20 1.45 31x31.75 3.00 1.30

296x15 3.20 1.45 31x32.00 3.00 1.30

298x15 3.20 1.45 31x32.25 3.00 1.30

300x15 3.20 1.45 31x32.50 3.00 1.30

302x15 3.20 1.45 31x32.75 3.00 1.30

304x15 3.20 1.45 31x33.00 3.00 1.30

306x15 3.20 1.45 31x33.25 3.00 1.30

308x15 3.20 1.45 31x33.50 3.00 1.30

310x15 3.20 1.45 31x33.75 3.00 1.30

312x15 3.20 1.45 31x34.00 3.00 1.30

314x15 3.20 1.45 31x34.25 3.00 1.30

316x15 3.20 1.45 31x34.50 3.00 1.30

318x15 3.20 1.45 31x34.75 3.00 1.30

320x15 3.20 1.45 31x35.00 3.00 1.30

322x15 3.20 1.45 31x35.25 3.00 1.30

324x15 3.20 1.45 31x35.50 3.00 1.30

326x15 3.20 1.45 31x35.75 3.00 1.30

328x15 3.20 1.45 31x36.00 3.00 1.30

330x15 3.20 1.45 31x36.25 3.00 1.30

332x15 3.20 1.45 31x36.50 3.00 1.30

334x15 3.20 1.45 31x36.75 3.00 1.30

336x15 3.20 1.45 31x37.00 3.00 1.30

338x15 3.20 1.45 31x37.25 3.00 1.30

340x15 3.20 1.45 31x37.50 3.00 1.30

342x15 3.20 1.45 31x37.75 3.00 1.30

344x15 3.20 1.45 31x38.00 3.00 1.30

346x15 3.20 1.45 31x38.25 3.00 1.30

348x15 3.20 1.45 31x38.50 3.00 1.30

350x15 3.20 1.45 31x38.75 3.00 1.30

352x15 3.20 1.45 31x39.00 3.00 1.30

354x15 3.20 1.45 31x39.25 3.00 1.30

356x15 3.20 1.45 31x39.50 3.00 1.30

358x15 3.20 1.45 31x39.75 3.00 1.30

360x15 3.20 1.45 31x40.00 3.00 1.30

362x15 3.20 1.45 31x40.25 3.00 1.30

364x15 3.20 1.45 31x40.50 3.00 1.30

366x15 3.20 1.45 31x40

GOV'T. POSITIONS

\$35 TO \$75 WEEKLY

MEN-WOMEN

Railway Mail Clerk	Meat Inspector
P. O. Laborer	Special Agent
Mail Clerk	Special Ins.
Matron	Steno.
General Clerk	Immigrant Ins.
Chauffeur-Carrier	City Mail Carrier
Skilled Laborer	Border Patrol
Watchman	Typist
Postman	Stenographers
RFD Carrier	Steno-Secretary
	Auditor

Instruction Bureau, 112-R, St. Louis, Mo.
Send me particulars about positions marked "X".
Address, location, opportunities, "How to Qualify".
etc.

Name _____

Address _____

AGE 18 TO 50

DEAF? READ THIS

Don't be handicapped by deafness. VIBRA-PHONES, small silver devices that fit snugly in the ears, are helping thousands. VIBRA-PHONES have no wires, head bands, or batteries to annoy you. They are so inconspicuous that even your friends will seldom know you are wearing them. Nothing to get out of order and no additional expense. This is what the hard of hearing have long been looking for. Write for our booklet. The Vibraphone Company, Station 1305, Central National Bank Building, St. Louis, Mo.

BIG CASH TAKING EASY ORDERS



BIG CASH TAKING EASY ORDERS

Earn big money selling Quaker's superb line of Men's Shirts, Ties, Underwear, Hosiery. Big values. NO SUBSTITUTIONS. Free Monograms. Big Cash Commissions. Shirts and Ties and Cash Bonuses. Expensive outfit FREE. Write TODAY, Dept. N-3, QUAKER SHIRT CORP., 1107 B'way, N.Y.

MONEY FOR YOU AT HOME

YOU can earn good money in spare time at home making display cards. No selling or canvassing. We instruct you, furnish complete outfit and supply you with work. Write to-day for free booklet.

The MENHENNIT COMPANY, Limited
245 Dominion Bldg., Toronto, Ont.

New Adding Machine Fits Vest Pocket!

Adds, subtracts, multiplies, and divides like \$300 machine—yet it costs only \$1.50. Weighs only 4 ounces. Not a toy—guaranteed for lifetime. Perfectly accurate, lightning fast. Sells on sight to business men, storekeepers, homes—all who use figures. Write at once for Free AGENTS Sample Offer and Money-Making Plan. 100% Profit!



Costs only \$2.50

DEAFNESS IS MISERY

Many people with defective hearing and Head Noises enjoy conversation, go to Theatre and Church because they use Leonard Invisible Ear Drums which resemble Tiny Megaphones fitting in the Ear entirely out of sight. No wires, batteries or head piece. They are inexpensive. Write for booklet and sworn statement of the inventor who was himself deaf.

A. G. LEONARD, Inc., Suite 683, 70 5th Ave., New York



Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements



On October 13, 1930, Brown wrote us that he sold \$1000 worth of Candy Crispettes in One Day. Another man, Nazer, of Massachusetts recently reported "\$3000 Profit in Three Months."

\$351 Cleared in One Day!

by W. H. Adams of Ohio. Jacob Gordon, N. J., reports \$4000 profit in two months. And in three months A. Marini, Cal., sold \$11,275 worth. Branci bought one outfit for making Crispettes on April 5th and ordered seven more by August. Iwata & Co., started with one outfit and bought four more last month. John Goli writes: "Everything going lovely. Crispette wrappers all over town. It's a good old world after all." We do not claim everyone will do so well but half these profits should satisfy any reasonable man.

Start a Crispette Business Now!

Be independent by making Crispettes at home. Start in spare time. No experience needed; little capital required. No canvassing necessary. Proven sales plans insure your success from the start: selling to stores, ateliers, boys calling on homes. Everybody likes Crispettes. Raw material cheap. Your profits 200% to 800%. Is it any wonder E. R. Nabor, Mass., writes: "Averaging \$3000 profit for three summer months."

Quick Success Possible!

Start anywhere—cities, towns, villages, crowded streets, midget golf courses. Open a little retail store or begin at home. Sell at wholesale to stores, grocers, bakers, druggists, wayside stands or lunch counters.

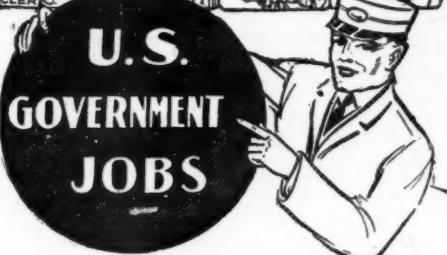
We Will Give You Flying Start!

We'll furnish the secret formula, raw material and equipment—plus all best selling items—help you build your own business. Send 50 cents for Book of FACTS, 100% PROFIT! Contains success letters from others—shows their places of business—tells how, when, where to start your own big profit business. Write now.

LONG-EAKINS CO.

393 High Street

Springfield, Ohio



\$1260 to \$3400 YEAR

Men—Boys—18 to 50

STEADY WORK

Paid Vacations

Common education
usually sufficient

Mail coupon
today—SURE

FRANKLIN INSTITUTE,
Dept. W-260, Rochester, N.Y.

Gentlemen: Rush to me, FREE of
postage, list of U. S. Government big
and small jobs not elsewhere sent. Send me
FREE 32-page book describing salaries,
hours, work, vacation and giving full partic-
ulars on how to get a position.

COUPON

Name _____

Address _____

V
5
3
M
A
R
3
1
XUM

Easy, Quick Way To Get Into AVIATION

"I Will Train
You AT HOME."

Major Rockwell

Learn to Earn \$300 to \$400 a Month

My new, practical Home Study Course offers you the quick way to get into this thrilling, fascinating business. I prepare you with the Aviation principles you must know in order to fill any of the hundreds of ground jobs requiring TRAINED men. I show you how to earn up to \$300 and \$400 a month in the quickest possible time.

In a Few Short Months

Give me an hour a day of your spare time and in a few short months you can be ready to enter this new industry. I will prepare you for well paid ground jobs open only to men trained in Aviation work. If you want to fly, the Major Training Course gives you all the principles, and I will arrange for your flying instructions here or near your home at reduced rates. You risk nothing. If you are not satisfied after completing my course, I'll refund your tuition. Take the first step by mailing coupon NOW for my big FREE BOOK and Tuition Offer.

MAJOR R. L. ROCKWELL,
Dayton School of Aviation, Desk K-6
Dayton, Ohio

Your Chance to Get an AIRPLANE FREE

When you become one of my students I will give you a chance to get an Airplane Free of any cost to you. Mail Coupon for particulars.

Name
Address
Town..... State..... Age.....

Major R. L. Rockwell,
Dayton School of Aviation,
Desk K-6, Dayton, Ohio.

Please rush FREE BOOK and

Free Offer.

FREE How To Secure A Government Position

Tells About These and Other Positions

RAILWAY POSTAL CLERK

\$1900 to \$2700 a Year

POSTMASTER

\$1200 to \$2500 a Year

CUSTOMS HOUSE CLERK

\$1140 to \$2700 a Year

INTERNAL REVENUE MEN

\$1100 to \$2700 a Year

R. F. D. MAIL CARRIER

\$1500 to \$21000 a Year

FREE BOOK tells how you can help you get a Government Job. For 8 years we have helped thousands. If citizens 18 to 60, you can qualify. Send for free book. Write or mail coupon TODAY. A. R. PATTERSON, Civil Service Expert, 1083 Wisner Bldg., Rochester, N.Y. Please send me your free book about Government Positions and how I can get one. Name..... Address.....

STEADY MONEY for YOU!



SHOWING THIS COMBINED LINE!

Earn Bigger Profits every week of the year with the new Public Service Line of fast-drying shirts—shirts—Hosiery—Underwear. Extremely liberal commissions. Profitable to producers. Splendid opportunity to make steady money and establish yourself in a well-paying, profitable business. Write for free book.

PUBLIC SERVICE MILLS
Dept. C-20, WEST NEW YORK, N. J.
Canadian Office: 110 Pandas Street
London, Ont., Canada



Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

A TWO-MONTHS' SUBSCRIPTION TO ALL STAR DETECTIVE STORIES FOR 25 CENTS!

In order to make new friends we will send you this magazine for two months beginning with the March issue for the above price.

Mystery-Action Stories
that fill you with thrills
and thrill you with chills!

Mail this coupon at once!

I enclose 25 cents (in stamps or coin) for which send me a two-months' subscription to ALL STAR DETECTIVE STORIES beginning with the March issue.

Name

Address

.....
.....
.....
.....

MORE MONEY FOR YOU! **SELL SHIRTS**
Build a permanent repeat order business with Rosecliff's high grade Shirts, Ties, Underwear, Hosiery. Guaranteed One Full Year. Cash commissions, extra cash bonuses, shirts for yourself. We pay postage. Prompt service. Free sales outfit. Write TODAY Dept. W-3 ROSECLIFF, 1237 Broadway, New York.

BECOME AN EXPERT ACCOUNTANT

Executive Accountants and C. P. A.'s earn \$2,000 to \$10,000 a year. Thousands of firms need them. Only 5,000 Certified Public Accountants in the United States. We train you thoroughly at home in a time for C. P. A. examination. No office work, no public speaking, no travel necessary. Training under the personal supervision of William B. Castenholt, A. M., C. P. A., and a large staff of C. F. P. A.'s. Complete course in accounting, bookkeeping, taxation. Write for free book, "Accountancy, the Profession that Pays." LaSalle Extension University, Dept. 375-H Chicago

The World's Largest Business Training Institution

LAW **STUDY AT HOME**
Become a lawyer. Legally trained men win high positions in law offices, law firms, and public life. Independent. Greater opportunities now than ever before. Trained by men with legal training. Earn \$5,000 to \$10,000 Annually. We guide you step by step. We build our own law library. During spare time, lawyers of L. B. confided to us. LaSalle students found among practicing attorneys of our state. We furnish all text material, including "Law Library," "Law Guide," "Law Guide," "Evidence" books FREE. Send for "Law Guide" and "Evidence" books FREE. LaSalle Extension University, Dept. 375-L Chicago

The World's Largest Business Training Institution

Play the Hawaiian Guitar like the Hawaiians!

10 motions used in playing this fascinating instrument. Our native Hawaiian instructors teach you to master them quickly. Pictures show how. Every step explained clearly.

Play in Half Hour

After you get the first few motions you play more motions and the instrument sounds the first little reception. No previous musical knowledge needed.

Easy Lessons

Even if you don't know one note from another, the simple motions and clear pictures make it easy to learn quickly. Play as you play.



when you enroll

GIVEN — sweet tones!

HAWAIIAN GUITAR, Carrying Case and Playing Outfit—

Value \$15 to \$20

No extra—everything included

TELEGRAMS: "HAWAIIAN GUITAR" 210 BROADWAY, NEW YORK

BANJO, Violin, Banjo, Tenor Guitars, Ukulele, Banjo, Violin, etc. Well-known instructors. Write for full information.

FIRST HAWAIIAN CONSERVATORY OF MUSIC, Inc.

5th Floor, Woolworth Bldg. Dept. 269 New York, N. Y.

Approved as a Correspondence School Under the Laws of the State of New York

Member National Home Study Council

RUPTURES

now hold securely without heavy, steel trusses



Rupture sufferers everywhere report amazing results with the Brooks Automatic Air-Cushion Appliance. Weighs but a few ounces. Over 3 million sold. No heavy pads, gouging steel girdles, leather straps or metal parts. Holds with marvelous comfort and security. Wear one 10 days on trial. Try it without a penny's risk. You'll say it's perfect too. Send for free book on Rupture, 10-day trial offer and full particulars—all sent postpaid in plain sealed envelope.

BUCKS APPLIANCE COMPANY, 1735 State Street, Marshall, Mich

\$-ALWAYS HAVE LUCK!-\$

Unlucky in Money Games, Love or Business? You should carry a pair of genuine MYSTIC BRAHMA RED LIVE HIGHLY MAGNETIC LODE STONES. Rare, American Gem Quality. Attract the LUCKY LODESTONES are carried by Occult Oriental people as a POWERFUL LUCKY CHARM, one to prevent Bad Luck, Evil and Misfortune, and the other to attract much Good Luck, Love, Happiness and Prosperity. Special sale \$1.00 for the two, with valuable instructions FREE. Pay postman H.27 and 15c postage on delivery. Satisfaction or money refunded. You can be LUCKY! Order yours TODAY! Dept. 237, P. S. BUREAU, General P. O. Box 72, Brooklyn, N. Y. NOTICE! We absolutely GUARANTEE these genuine Mystic Brahma Lodestones are ALIVE! Just what you want, for they are the REAL THING—POWERFUL HIGHLY MAGNETIC! GET YOURS NOW!!

PATENTS

Time counts in applying for patents. Don't risk delay in protecting your ideas. Send sketch or model for instructions or write for FREE book, "How to Obtain a Patent" and "Record of Invention" form. No charge for information on how to proceed. Communications strictly confidential. Prompt, careful, efficient service. Clarence A. O'Brien, Registered Patent Attorney, 187-G Security Savings and Commercial Bank Building (directly across street from Patent Office) Washington, D. C.



SHAPE YOUR NOSE

Anita Nose Adjuster shapes flesh and cartilage—quickly, safely, painlessly, while you sleep or work. Lasting results. Gold Medal Winner. Doctors approve it. \$7,000 users. Write for FREE BOOKLET.

ANITA INSTITUTE

C-42 ANITA BLDG. NEWARK, N. J.

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

Get Into The Shoe Business Without Investment!

We start you. Earn big money with our remarkable direct-to-wearer plan. Making profits is easy when you show splendid Tanners Line of Shoes and Hosiery for men, women and children.

FOOTWEAR SERVICE FOR

SELLERS

*You're
Without
Cash*



Lone Eagle

\$37.50

*Miss
America*
\$37.50

Buy Direct —at lowest cash prices on easy payments. You wear while paying. Watch sent for you to see and examine without one penny down.

RAILROAD WATCHES

Let us send you our beautiful watch catalogue showing the Famous Santa Fe Mogul Railroad Watch, and the 21-jewel Santa Fe Special in both 16 and 12 sizes. Also the new 60 hour Bunn Special. Catalogue sent FREE!

DIAMOND RINGS

Write for our New Diamond Ring of Romance and Bulova Wrist Watch Catalogue showing marvelous designs. Never have we been able to offer such beautiful diamond rings and artistic dependable watches at such low prices. The catalogue is sent FREE!

Ask for our Special Spot Cash Offer. Good for 30 days only.

SANTA FE WATCH COMPANY
Dept. 355, Thomas Bldg., TOPEKA, KANSAS

To SANTA FE WATCH CO.
Dept. 355, Thomas Bldg., Topeka, Kansas

Please send me catalog I have checked.
Railroad and dress pocket watches
Ladies' and men's wrist watches
Ladies' and men's Diamond Rings

Name Address City

Address City

Please mention NEWSSTAND GROUP—MEN'S LIST, when answering advertisements

FOR THOUSANDS OF MEN TOBACCO HABIT BANISHED Let Us Help You

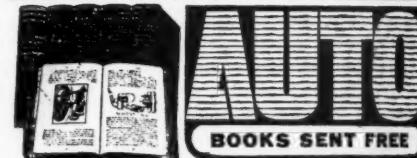


Stop craving tobacco in any form. Tobacco Redeemer in most cases relieves all craving for it in a few days' time. Don't try to quit the tobacco habit unaided. It's often a losing fight against heavy odds, and may mean a distressing shock to the nervous system. Let Tobacco Redeemer help the habit to quit you. It is pleasant to use, acts quickly, and is thoroughly reliable.

Not a Substitute

Tobacco Redeemer contains no habit-forming drugs of any kind. It is in no sense a substitute for tobacco. After finishing the treatment, there should be no desire to use tobacco again or to continue the use of the remedy. In case the treatment is not perfectly satisfactory, we will gladly refund any money paid. It makes not a particle of difference how long tobacco has been used, how much it is used, or in what form—whether it is cigars, cigarettes, pipe, plug, fine cut or snuff. In most cases, Tobacco Redeemer removes all craving for tobacco in any form in a very few days. And remember, it is offered with a positive money-back guarantee. Write today for our free booklet showing the injurious effect of tobacco upon the human system and convincing evidence that Tobacco Redeemer has relieved the craving for tobacco in thousands of cases.

NEWELL PHARMACAL COMPANY
Dept. 793. Clayton Station St. Louis, Mo.



on approval. Just mail the coupon and we'll send you a set of these remarkable books just off the press. Whether you're a mechanic, expert or apprentice, auto owner or driver, if you're interested in knowing all about automobile mechanisms, then take advantage of this Free Offer.

DON'T SEND A PENNY!

A better job—in the gigantic auto industry. BIGGER PAY—a chance to go into business for yourself and get a share of the huge profits waiting for an man who even half tries to improve his Auto. Enclosed with the self-taught books is a new way—without studying or memorizing. Simply use the JIFFY INDEX to look up the answer to any auto problem. Built by eleven of America's greatest mechanics. Built by eleven of America's greatest mechanics. Written in simple language so you can understand it!

6 Big Volumes 1931 Edition

2600 pages, 2000 illustrations, wiring diagrams, including aviation motors. DeLuxe edition, gold-stamped, flexible binding.

AMERICAN TECHNICAL SOCIETY, Dept. A-3146, Drexel Ave. & 58th St., Chicago, Ill. Send me the 1931 edition of your AUTO BOOKS. I will pay the few cents delivery charges only, but if I choose to, I may return them express collect. If after 10 days use, I prefer to keep them, I will send \$2 and pay the balance at the rate of only \$3 a month, until \$24.50 is paid. Please include free membership in your offer above.

Name Address
Reference Address

FREE Privilege of consulting Automobile Engineers of American Technical Society for one year without cost if you mail coupon immediately.

AMERICAN TECHNICAL SOCIETY
Drexel Avenue & 58th Street
Dept. A-3146, Chicago, Ill.

V
5
—
3

"Take me away from him!"

"Lock me up so I cannot escape—beat me if you like—and I will tell you all I know. But while HE is my master I will not betray HIM!"

Terrorized, trembling, she crouched there—an exotic vision from the Orient—pleading with the stern-faced detective to save her from the fiend she called "Master!"

Who was this girl—whose rare loveliness stood out so richly against its setting of murder and deviltry?

Who was this Yellow Monster who plucked men from life and left no clue behind?

What were the strange bonds that made her his slave?

If you would join London's greatest detectives in unwinding this and many other equally baffling Oriental Mysteries—if you would match your wits against the most diabolical Oriental cunning ever conceived—then by all means send at once for Your Free Examination Set of



If you would enjoy exciting and unbelievable adventures as you plunge from the bright world of the West into the dubious underworld of the East—send for your free examination set while this offer is still open!

MASTERPIECES of ORIENTAL MYSTERY 11 Volumes of Matchless Thrills by SAX ROHMER

NO ORDINARY mystery stories are these, but the hidden secrets, mysteries and intrigues of the Orient itself!

Before your very eyes spreads a swiftly moving panorama that takes you breathless from the high places of society—from homes of refinement and luxury to sinister underworlds of London and the Far East—from Piccadilly and Broadway to incredible scenes behind closed doors.

free!

IF YOU ACT NOW!

A fortunate circumstance enables us to offer you free, as a premium for promptness, this beautiful 16-inch Karamanéh necklace of fine imported simulated light green Jade and semi-precious stones.

JADE is the semi-precious stone celebrated by poets and the delight of Chinese emperors.

The retail value of this lovely necklace is \$3.00—but you get it free if you accept our offer now!

temples in far off China—to the jungles of Mala, along strange paths to the very seat of Hindu sorcery.

PACKED WITH THRILLS FROM COVER TO COVER

Be the first in your community to own these, the most wonderful Oriental mystery stories ever published—books that have sold by the hundred thousand at much higher prices—books you will enjoy reading over and over again. Handsomely bound in substantial cloth covers, a proud adornment for your table or shelf.

These are the sort of stories that famous statesmen, financiers and other great men read to help them relax—to forget their burdens. To read these absorbing tales of the mysterious East is to cast your worries into oblivion—to increase your efficiency.

Priced for Quick Sale

Cutting royalties to the bone and printing these volumes by the hundred thousand when paper was cheap, makes this low price possible. But the number is limited; so mail coupon today!

Complete Sets Free on Approval

You needn't send a cent. Simply mail the coupon and this amazing set will go to you immediately, all charges prepaid. If it fails to delight you, return it in ten days at our expense, and you owe us nothing.

MAIL COUPON TODAY, YOU RISK NOTHING.

3-31

Dept.

109

MCKINLEY,

STONE &

MACKENZIE

114 E. 16St., N.Y.

Send me for free examination, charges prepaid, your set of Masterpieces of Oriental Mystery. I will mail some short volumes. If after 10 days, I am delighted, I will send you \$1.00 promptly and \$1.00 a month for only 14 months; when you receive my first bill, you may return to us the Karamanéh necklace without extra cost. Otherwise, I will return the set in 10 days at your expense, the examination to cost me nothing.

Name.....

Street.....

City..... State.....

Occupation.....

Age: Over 21? Under 21? 5% off for cash.

McKinley, Stone & Mackenzie, Dept. 109, 114 E. 16St., New York City, N.Y.

M
A
R3
1

XUM



**BEWARE OF
IRRITATION**

**LUCKY
STRIKE
CIGARETTE**

Toasting removes
dangerous irritants
that cause
**Throat irritation
and Coughing ..**

“It's toasted”

© 1930, The American Tobacco Co., N.Y.

V
5
—
3

M
A
R

3
1

XUM